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# AMERICAN FRUIT GROWER


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**September, 1918**

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*Edited by Samuel Adams*

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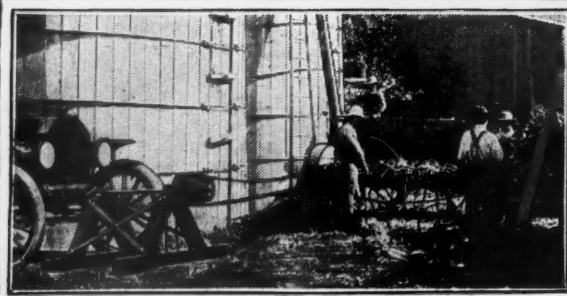
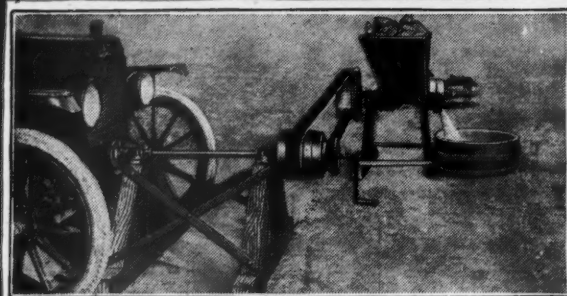
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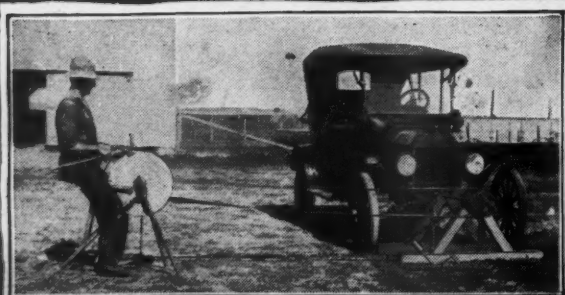
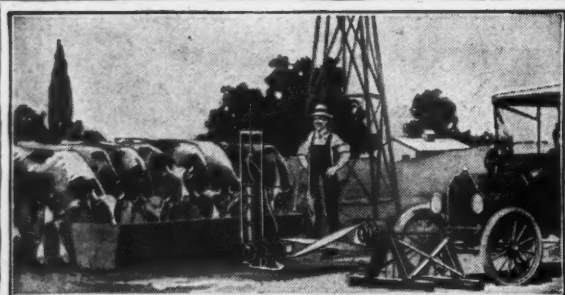
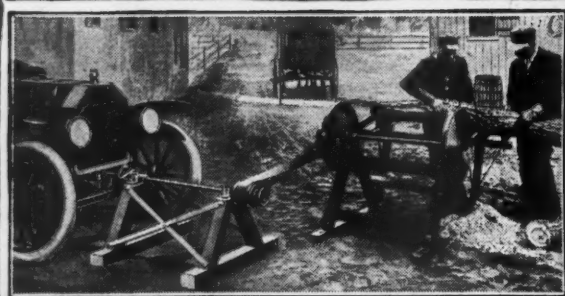
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# AMERICAN FRUIT GROWER

A consolidation of Green's Fruit Grower, Rochester, N. Y., Established 1880;  
The Fruit Grower, St. Joseph, Mo., Established 1889;  
American Fruit Grower, Charlottesville, Va., Established 1915

Published monthly by **AMERICAN FRUIT GROWER CO., Inc.**

329 Plymouth Court, CHICAGO, ILL.  
Eastern Office: Rochester, N. Y. Home Office: Charlottesville, Va.

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**Special Advertising Representatives**

JOHN M. BRANHAM CO.

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Entered as second-class matter Oct. 17, 1917, at the Post Office at Chicago, Ill., under the Act of March 3, 1879.

VOL. XXXVIII

SEPTEMBER, 1918

No. 9

## The Story of "Curdmore" What One City Man Did in the Orchard Business

By Paul C. Stark, Associate Editor

IT HAS been said that nine-tenths of the men in business who have red blood in their veins have a desire to get back to the soil. This I believe to be literally true. And it would be surprising if we knew what a tremendous per cent of city business men are planning (secretly or otherwise) to some day get away from the toil and grind of business and get out into the pure air and sunshine of the farm to spend their declining years.



W. G. Curd, Orchardist

A short time ago I visited a man on a farm who was formerly in just this position. This man has made good in a big way and as I walked through his magnificent orchard, saw his palatial home, learned the make of his seven-passenger touring car, discovered that this country home was electric lighted, heated by steam, and that he had every convenience that he could possibly have in the city; then walked around a barn that seemed big enough for an ammunition factory, I realized that here was another city man who knows what orchard success means.

This man's name is W. G. Curd and his post office is Saverton, Mo. He is a real apple grower, a real business man, a real success, and the idea that has grown into this splendid home and splendid orchard originated in his mind when, as a government employee in the city of St. Louis, he felt his health slipping and he knew that his days in the office and on the street were numbered. From a man of 135 pounds,

weak and pale, I found him weighing 210 pounds, and a perfect picture of health.

### Mrs. Curd an Able Assistant

He didn't do this work alone, however. As is the case with most successes, there was a woman in it, and that woman (Mrs. Curd) is the same one whose exhibit of apples at San Francisco, at the Panama Pacific Exposition, created nation wide comment and who received the one gold medal awarded for a collection exhibit of apples in variety at that great international show. In order to win this, she had to take first premium in every variety she exhibited. She is the same woman who has won medals and high honors at many famous exhibits within the past few years and who is recognized as one of this country's best authorities on fruit display. Mrs. Curd has also specialized in raising fine Barred Plymouth Rock chickens and she takes prizes wherever she goes.

The Curd apples are shown every year at the Missouri State Fair—carrying off many premiums. Their Jonathans, I understand, have never been beaten there. In 1915 and 1916 they took every first and second premium in all entries of plates; also first on every bushel entry. In 1915 the contest on Jonathan was so strong that every apple was taken out by experts and all bushels eliminated except eight. The eight bushels had only two apples in it not first class. The Curds won first premium with an absolutely perfect bushel. Later in St. Louis at one of the big apple shows a well-known apple man came over to Mrs. Curd and recalled this contest. He said he wanted to meet the grower who could produce such perfect apples.

Following the San Francisco Exposition the managers of the Seattle Exposition requested Mr. Curd to send some of his apples to their show to let the people of the Northwest see the fruit that had created such a sensation at San Francisco. They wrote him later that Missouri visitors at this display had offered a dollar apiece for the Jonathans displayed, and that it had been necessary to put up ropes around his exhibit to protect it. Thus does the Mississippi Valley grow apples.

When Mr. Curd decided to leave St. Louis, he did not go very far—about 125 miles to the north, and in a beautiful location overlooking the Mississippi River he bought 120 acres of land for which he paid

\$20.00 per acre. Right here he established his orchard and Mrs. Curd thought out a name for it—"Curdmore"—a name that is now familiar among central Western orchardists. This has been about fifteen years ago and this same land would bring \$1,000 per acre now if he would sell it. But Mr. Curd would not sell for that because his orchard is paying dividends on a higher valuation.

He may have been successful in business before he planted an orchard, but I venture a guess that in all his business career no other investment has paid him such returns as this orchard. He told me his salary in St. Louis was a good one, yet in 1916 his orchard netted \$24,000, in 1917, \$18,000, and what he will get this year is guesswork, but he has not missed a crop since his trees came into bearing.

### Why Successful

His success is due, according to his own statement, to good judgment in selecting his land and varieties—and by taking the advice of men who knew, thereby getting the right kind of a start. In this big orchard he used mainly three varieties: Grimes Golden, Jonathan and Black Ben. If he was planting now, he would change that list slightly as his new plantings made within the past two or three years contain big blocks of Stark Delicious. However, his first selection was a wise one and the results have proven his judgment good. Mr. Curd admits one mistake, and that is the planting of Grimes Golden which are not double-worked. He has corrected this mistake, however, and all his young Grimes are double-worked.

The community in which the orchard is located is not unlike many other sections of Missouri, Illinois and other Central States. The land is not of the richest and in that section is really not considered first-class farm land, but it grows good apples. Application of sound business principles to his farm idea has made success possible with Mr. Curd.

### Thorough Orchard Methods

I soon discovered him to be a scientific man, and that every up-to-date method was employed in his orchard. He is a strong believer in cultivation, thorough spraying and one of the most consistent users of barnyard manure among Missouri orchardists, believing that no fertilizer is so good. I found him naturally modest

and inclined to minimize the success he has made, and I have noticed that at horticultural meetings he has very little to say, but when he does speak everybody listens, for he speaks from an experience that has produced one of Missouri's most profitable orchards.

Some years ago Mr. Curd had the promise of a splendid crop of Jonathans, but along in midsummer a severe drouth began to affect Missouri orchards. A number of his neighbors suffered severe losses by their Jonathan dropping, but for some mysterious reason Mr. Curd's Jonathans did not drop. He thinks that the heavy application of barnyard manure during the preceding seasons resulted in his great crop that year. He claims that the extra strength of his trees and the increased water-containing power of his soil, due to the manure, enabled his trees to hold their fruit.

### Picking and Packing

The picking and packing of fruit in Mr. Curd's orchard is important, according to the owner. He says that he considers it even more important than growing the fruit. "No matter," he said, "how fine your apples are, if you pick carelessly and pack poorly or dishonestly your fruit will not give satisfaction on the market." In talking with buyers who have seen or handled Mr. Curd's fruit, have found that he "practices what he preaches." His reputation among buyers is an enviable one and Mr. Curd's apples always bring premium prices and the question of selling doesn't bother him very much, for buyers are always ready for his fruit.

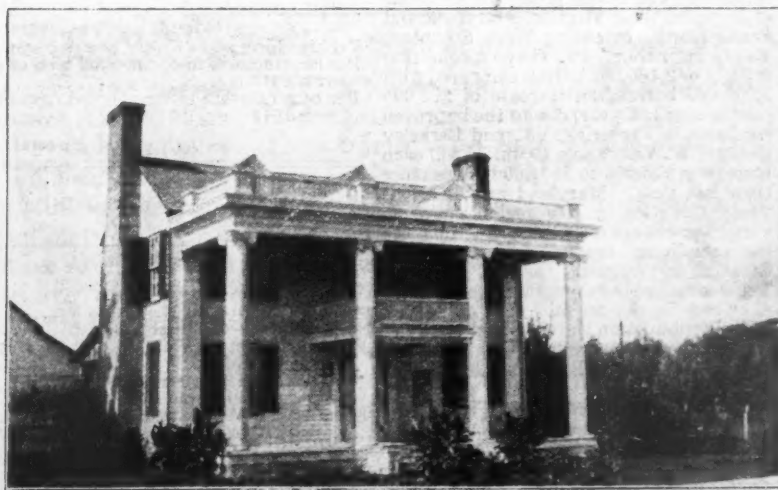
What buyers think of his product is indicated by a letter I saw from a big South Water Street commission man: "I want to say that your apples were, by far, the most honestly packed that I have ever seen." Mr. Curd's apples are machine graded, the machine which he is using has given him splendid results and not only has it saved labor, but has helped to give him an enviable reputation among wholesalers and retailers alike.

The results achieved by this orchardist is out of the ordinary only because of the enthusiasm, study and hard work put into it. Mr. and Mrs. Curd are typical twentieth century folks who love their work and to whom the great out-of-doors has been a source of health, happiness and wealth.

The story of their success may be an inspiration to other tired business men who have dreamed of a quiet home in the country and who are wondering if they can grow an orchard successfully.



Packing Scene in Mr. Curd's Orchard



"Curdmore," Saverton, Mo.



# Official Apple Crop Report for August, 1918

By Leon M. Estabrook, Chief of Bureau of Crop Estimates

**T**HE DECREASING reported during July in New York, New England and the Central States generally, explain the three point drop from 56.7% July 1, to 53.8% of a full crop August 1, for the estimated apple production of the United States. The strictly commercial apple crop is now forecasted at 24,385,000 barrels, as compared with 22,519,000 barrels for the United States in 1917, an increase of 8.3% over last year. For comparison the 1916 crop was estimated at 25,069,000 barrels.

The boxed apple situation has suffered little change during July. This portion of the crop will be about 5,000 cars short of last year's 34,000 car crop.

An outstanding feature of the 1918 apple crop generally throughout the country, particularly in the east and in the west, is the good size and quality of the fruit. Shortage of barrels may effect the barrel crop output to a greater or less extent, particularly in the case of small growers, who may be inclined to ship in bulk rather than in barrels.

## New York

Despite a four point decrease in the condition of the New York apple crop during the month of July the production forecasted for this State as compared with the exceedingly light crop of last year, is still the outstanding feature of the 1918 apple situation. New York is now estimated with 8,312,000 barrels or 39,400 cars as compared with 14,900 cars last year on a 160-barrel per car basis. August 1 condition is given at 61% as compared with 65% July 1, this decrease being explained by the unusual July crop. Western New York, embracing the highly productive Lake Shore Counties, shows the highest condition in the State. This region will produce 31,000 cars as compared with a 7,000 carlot crop last year. The Hudson Valley indicates a crop of 4,775 cars as compared with 6,710 cars last year, a decrease of 1,935 cars.

Severe winter injury to trees in all parts of the State, recorded early in the season, is emphasized by later developments. The quality and size of the apples in New York is reported very good in the well cared for orchards, despite excessive aphid injury in certain parts of Western New York.

Baldwins are reported at about 50% of a crop while Greenings are generally much better. Wealthy and Duchess are given a high figure in Western New York, while Ben Davis and Greening are best in the Hudson Valley with Spys light.

THE CHAMPLAIN DISTRICT, comprising Counties of New York and Vermont bordering on Lake George, a noted McIntosh, Fameuse and Greening district, indicates a production of 153,000 barrels as compared with 120,000 barrels last year.

## New England

The New England Baldwin belt, including Maine, New Hampshire and Massachusetts, the apple crop of which is over half Baldwin, promises 619,000 barrels or 3,870 cars this season as compared with 750,000 barrels or about 6,000 cars in 1917.

MAINE shows a further decline and is now estimated at 31% as compared with 47% last year, a four point decrease is noted as compared with July 1.

SHERANDOAH-CUMBERLAND DISTRICT, comprising the heavy producing Counties of Virginia, West Virginia, Maryland and Pennsylvania, extending from Staunton, Va., to Harrisburg, Pa., shows a condition of 54%, or 2,160,000 barrels compared with 1,898,000 barrels, an increase of 262,000 barrels over last year, due to the improved condition in Frederick, Va., and Berkeley County, W. Va. These Counties will each have from 125,000 to 150,000 barrels more than last year. Maryland and Pennsylvania Counties in this region show no particular change over last year, while the low condition around Fishersville and Staunton in Augusta County, Virginia, tends to reduce the sharp increase apparent elsewhere in the region. The apples are well distributed on the trees and the quality and size will be excellent with continued favorable weather. Rain is needed in some localities.

THE PIEDMONT SECTION of Virginia, including the Roanoke section, is now estimated at 345,000 barrels this year as compared with 485,000 barrels last year, a decrease of 140,000 barrels. This shortage is principally due to a light Albemarle,

Pippin and Winesap crop. The Roanoke section will show somewhat of an increase over last year and tends to overcome the shortage in Albemarle and adjacent Counties. A noticeable feature in Virginia's prospects is the splendid size and quality apparent.

## Ohio

A good Rome Beauty crop is forecasted for Southern Ohio, estimated now at 258,000 barrels as compared with 122,000 barrels last year.

## Central States

A sharp decrease, varying from 4 to 15 points is generally reported throughout the apple regions of the Central States during the month of July. This decrease is attributed to drought and developing insect and disease injury. The unfavorable winter just past left the trees in many regions with low vitality.

MICHIGAN. Michigan condition for apples August 1, is reported at 55% of normal, representing 1,073,000 barrels as compared with 515,000 barrels last year, an increase of 558,000 barrels. July 1 condition was 60% of normal.

ILLINOIS. The apples in the well cared for orchards in Southern and Western Illinois are developing normally, although considerable fungus and insect injury is

reported. Attention is called to the decrease from 48% of normal for this region July 1, to 37% normal August 1. Ben Davis is reported above the average for the region, while Jonathan and Winesaps are low. Illinois now promises 992,000 barrels as compared with 1,474,000 last year, a decrease of 482,000 barrels.

## Missouri River Region

Dry weather is reported as reducing in size the apples in this region, while codling moth injury is reported as serious. For this region, centering at the intersection of Iowa, Nebraska, Missouri and Kansas, there is now forecasted 34% of a crop, or 714,000 barrels, a decrease of 524,000 barrels as compared with last year's 1,239,000 barrels.

## Ozark Region

Benton and Washington Counties in Arkansas are reported as with about one-half a crop with a possibility of an increase under favorable conditions. The entire Ozark region, including Southwestern Missouri, is now estimated at 520,000 barrels as compared with 793,000 barrels in 1917, a decrease of 273,000 barrels. Missouri is reported as going down badly, on account of drought, and is now estimated at 36% of normal as compared with 42%

normal July 1, and 52% of a full crop for 1917.

## Western States

The season is progressing favorably for the Western boxed apple crop, and on the whole the quality and size of fruit will be very much better than last year, particularly in the northwest. The production in Washington, Oregon and Idaho is still estimated at about 20,000 cars of 750 boxes, compared with 24,900 cars for last year. Jonathans are very light, while Spitzenbergs and Delicious are also below average. Winesaps are best.

WASHINGTON. A 1,500-car decrease compared with last year's 18,500 cars is forecasted for Washington. Wenatchee has suffered in some localities for lack of moisture, but on a whole has a good crop with prospects for excellent size and quality. North Central Washington is estimated at somewhat under 6,000,000 boxes as compared to 6,250,000 last year. Of its 7,700 cars at 750 boxes each, 2,700 will be Winesaps, 800 cars Spitzenberg, 800 cars Delicious, 660 cars Jonathans and 330 cars Rome Beauty.

A 1,000-car decrease over last year's 8,500 cars for the Yakima district is generally reported. The Winesap crop is good and despite considerable codling moth and San Jose scale injury the Yakima Valley crop will be of excellent size and quality.

Dry weather has reduced the Spokane estimate to about 900 cars as compared with 400 last year. The remaining increase over 1917 will about offset a very light crop in the Walla Walla section.

CALIFORNIA. Uncertain conditions prevail in the Watsonville District this year. The lack of sufficient moisture is an outstanding factor. Last year Monterey and Santa Cruz Counties shipped approximately 2,700,000 boxes. With August conditions favorable these two counties may ship 2,400,000 boxes. Newtowns, the principal variety, are reported with a much higher condition than Belleflowers. The dried apple situation is uncertain. Last year the California dried apple output amounted to 9,000 tons, or 40% of the 1917 crop. This high percentage is explained by the very light crop in New York last year, which is the principal dried apple producing State. Unless the price of dried stock rises this output will be very greatly reduced and more of the apples will be shipped green.

OREGON. Conditions in the Hood River Valley continue favorable. The season is three weeks ahead of last year. The apples are free from insect and disease injury and will be of good size and quality. About 1,500 cars, 750 boxes each, almost exclusively Newtowns and Spitzenbergs, are estimated for 1918, a 10% increase over last year. The apple crop in other Oregon districts is light—400 cars will cover the Rogue River and Western Oregon production.

IDAHO. The very light crop for Idaho is the outstanding feature in the boxed apple situation. The light Jonathan crop in the northwest is emphasized by the almost failure of this leading variety in Idaho. About 600 cars of marketable apples will probably cover the 1918 production, and most of these will come from the Lewiston and Twin Falls Districts. Worms are attacking in force the few ples remaining in the Payette District.

COLORADO. The western slope apple crop will not exceed 2,300 cars, of which 1,400 cars are estimated for the Grand Junction District, 350 cars for Delta County and 250 cars for Montrose County. The quality and size of the Colorado apples will be better than in 1917. Canon City crop will not exceed 225 cars. Unlike the Northwest, Colorado Jonathans are reported with good condition.

UTAH. A rather heavy worm injury is reported for Utah, although otherwise size and quality of the apples are reported excellent. The total crop is now estimated at about 525,000 boxes, compared with 550,000 in 1917. Utah Jonathans are reported in good condition. It is estimated that 700 cars of Utah apples will move this year.

NEW MEXICO. Spotted conditions prevail in New Mexico. The Farmington crop is almost a total failure while frost reduced the Pecos Valley crop to about 400 cars, including apples hauled out in wagons. Otero County is reported with a good crop and may produce 200 cars this year.

## United States Department of Agriculture BUREAU OF CROP ESTIMATES Washington, D. C.

### Special Commercial Apple Crop Report, August, 1918

State	Condition		Commercial Crop		State	Condition		Commercial Crop	
	Aug. 1918	Final 1917	August 1918	Final 1917		Aug. 1918	Final 1917	August 1918	Final 1917
Maine...	31	47	242,000	400,000	Ind. ....	33	51	281,000	434,000
N. H. ....	40	43	108,000	120,000	Ill. ....	37	55	992,000	1,474,000
Vt. ....	32	32	139,000	135,000	Mich. ....	55	25	1,072,000	515,000
Mass. ....	50	45	250,000	225,000	Wis. ....	50	52	119,000	124,000
R. I. ....	55	44	14,000	11,000	Minn. ....	40	60	33,000	50,000
Conn. ....	48	40	120,000	100,000	Iowa ....	27	55	119,000	250,000
N. Y. ....	61	23	6,312,000	2,380,000	Mo. ....	36	52	781,000	1,128,000
Penn. ....	54	48	1,023,000	911,000	S. D. ....	42	56	3,000	5,000
N. J. ....	62	53	490,000	408,000	Nebr. ....	26	65	86,000	225,000
Del. ....	60	67	96,000	105,000	Kan. ....	43	58	519,000	700,000
Md. ....	54	51	284,000	256,000	Ky. ....	34	51	95,000	143,000
Va. ....	47	53	1,525,000	1,650,000	Tenn. ....	52	48	163,000	150,000
W. Va. ....	58	45	948,000	702,000	Ala. ....	75	65	28,000	24,000
N. C. ....	43	51	169,000	200,000	Tex. ....	50	54	22,000	23,000
Ga. ....	68	70	122,000	120,000	Okla. ....	44	70	31,000	54,000
Ohio ....	49	29	899,000	532,000	Ark. ....	45	68	266,000	402,000
Total, Barreled Apple Producing States.....					50.5 40.4 17,353,000 13,966,000				

### Boxed Apple Producing States

State	Condition		Commercial Crop Boxes		Equivalent in Barrels	
	Aug. 1918	Final 1917	1918	1917	1918	1917
Montana .....	45	61	165,000	222,000	55,000	74,000
Colorado .....	51	60	1,875,000	2,103,000	625,000	701,000
Arizona .....	72	75	45,000	48,000	15,000	16,000
New Mexico .....	38	55	381,000	525,000	127,000	175,000
Utah .....	75	83	525,000	552,000	175,000	184,000
Idaho .....	17	97	477,000	2,718,000	159,000	906,000
Washington .....	74	85	12,546,000	13,860,000	4,182,000	4,620,000
Oregon .....	60	73	1,830,000	2,139,000	610,000	713,000
California .....	76	84	3,252,000	3,522,000	1,084,000	1,174,000
Total, Boxed Apple Producing States.....			21,096,000 25,689,000		7,032,000 8,563,000	
Total, United States .....			53.8 49.9		24,385,000 22,519,000	

### Three boxes equivalent one barrel

Per cent increase in United States commercial crop as compared with 1917 .....	8%
Per cent increase in commercial crop of barreled apple producing States as compared with 1917 .....	24%
Per cent decrease in commercial crop of boxed apple producing States as compared with 1917 .....	18%

### Special Regional Report

Region	Condition		Commercial Crop	
	Aug. 1918	Final 1917	1918 Barrels	1917 Barrels
Western New York .....	65	15	4,940,000	1,118,000
New England .....	38	46	619,000	750,000
Hudson Valley .....	37	52	764,000	1,074,000
Champlain Dist. of N. Y. and Vt. ....	37	29	153,000	120,000
Shenandoah-Cumberland Dist. ....	54	52	2,160,000	1,898,000
Piedmont Dist. of Va. ....	39	57	345,000	485,000
Western Michigan .....	49	25	644,000	350,000
Southern and Western Illinois .....	33	55	768,000	1,320,000
Southern Ohio Rome Beauty Dist. ....	60	29	210,000	122,000
Ozarks (N. W. Ark. and So. Mo.) .....	40	61	520,000	793,000
Missouri River Region .....	34	59	714,000	1,239,000
Pacific N. W. (Wash., Ore., Ida., Mont.) ..	64	84	*5,006,000	*6,313,000
Colorado .....	51	60	*625,000	*701,000
California .....	76	84	*1,084,000	*1,174,000

\*To reduce to boxes multiply by 3.



# Our Editor's Page

## After Work—Rest

**B**UT be sure the work is done properly first. We have been doing an extra share ever since we entered this war, but it is not done, and therefore it is not yet time to rest.

Have you ever been on a long day's tramp and come back so tired you could scarcely crawl, and so hungry that you would have walked ten miles more for a good meal? Have you seen the light of your home twinkle in the distance, and felt fatigue fall away from you even though there were still many weary steps to be taken? You didn't sit down in the dark and cold, but quickened your pace.

And once inside by the glowing hearth, have you seen a smiling face look in and say those heavenly words, "Supper almost ready." If so, you have stopped grumbling about being tired and hungry. You have sat in smiling anticipation, and remembered to be thankful that you did not fall into the river when you were fishing, or go over the precipice you scaled.

Now there you are today as regards the war. You are not yet seated at the peace table, but you can already see preparations for that event. You recall that you have not suffered the terrific experiences of millions who still smile bravely.

Winter approaches. There will likely be trouble about coal, about transportation, about sugar, trouble almost every way. Are you going to remember that "in war times Governments are often confronted with a choice of evils." If it's bad, it might be worse had Uncle Sam not done his best. Don't comfort the enemy by criticising and grumbling.

## Glad to Be Americans

**I**SN'T it fine to be an American? We've always been proud of it, but just now it is something to be "by ordinar" thankful for, as our Scotch cousins say.

Even those of us with the most modest and sensitive ears can endure an occasional outburst of the eagle's scream in these times. But it isn't the scream of the eagle that sounds best to us. It is the voice of gratitude and approval from our friends the allies and the new found voice of respect and fear from "our friends the enemy."

At last the Hun has been forced to own that we do make a difference in his calculations. A really painful difference. Though they scorned us as weighing no more than a hair in the consideration of REAL soldiers, that hair has proved to be the traditional one that breaks the camel's back. The first groan from the over-confident hosts came after Americans went in side by side with the French, British and Italians.

It is a heartening thought that the battle in which they first took part as an American force, was the first in which the Germans completely gave way since the very beginning of the war. It would be neither becoming nor true to boast that our boys have

fought better than those who have been forced back for so long. We need not ambition a higher fame than has been won by the noblest soldiers of history, but we do, and should, feel proud that we have been found worthy to stand on full equality with them, and that the weight of our presence has speedily tipped the scale in favor of allied victory.

## Are Birds Friend or Foe?

**F**ARMERS have been next to cats in the activity of their warfare upon birds. Now, however, a change has come over their spirit, and they have learned that these dear little creatures are far more friend than foe, even when they appear to be engaged in destroying crops.

We have heard of a number of cases where farmers were persuaded that birds were pulling up young plants or seed, and, upon closer investigation, it was proved that they were really preying upon the worms that threatened the life of the plant. Rural Life tells of a man who rid his cranberry bog of worms by inducing birds to build in it.

Naturally birds take on new beauty in our eyes when we find that instead of picking our pockets they are arresting the thieves. At the same time the house cat loses something of her charm when we note that a simple trap catches more mice in a night than pussy will in a week. Few cats will attack a rat at all, while they are inveterate bird-hunters, and will spend their leisure hours gleefully lying in wait for small birds, while the mice frolic forgotten.

It is said that if all birds were destroyed, man could not survive ten years. Such vast hoards of insects would develop as to make the earth uninhabitable.

## The Good Gardener Goes Slow

**T**HE CATALOGUES of some seedsmen disclose the dangerous practice of listing novelties and strains in such a manner as to obscure the merits of the true and tried sorts of vegetables. One result of this practice must be that many inexperienced gardeners are induced to turn their garden venture into an experiment by filling the garden spaces with untried things.

The good gardener goes slow even when his own trusted seedsman advises him to take some novelty or improved strain for his main planting. He goes slow because his experience has informed him that improved strains are not always adapted to his conditions; because his kitchen garden is a plot for growing garden stuff for the home table, not an experimental plot.

Some catalogues mention strains of older varieties which mature five days earlier than the parent strain. This trait may be valuable to the market gardener who strives to have an unbroken succession of stuff throughout the season, but the good market gardener will make the improved strain prove its superiority.

## Three Educational Values

**Y**OU have noted that three standards of value are applied to every man—the value he sets on himself, that put on him by his neighbors, and his value in the eyes of God. Of these the second comes a little nearer to being a touchstone than the man's estimate of himself, which is often sadly unrelated to reality. The last standard is the only one founded on truth.

Education is also regarded from three distinct points of view, and which of them is just, is more open to argument than the question of character. First there is the education essential to that fine flower called "a gentleman and a scholar;" the severe classical drill which gives a mental training said to be attainable in no other way. That it does develop the mind, is proved by the many distinguished men who were students under this regime, which had little to do with the practical issues of life even in times past, much less with the life of today. Such a scholar thinks his learning of great worth.

Then there is the education which might rather be called cultivation. The phrase "a cultured person" carries a suggestion of charm and refinement, things by no means to be despised, but rather sought after. One who possesses them is apt to be esteemed by his neighbors as an agreeable and well-informed companion. Again—what relation to the activities of life does such an education bear?

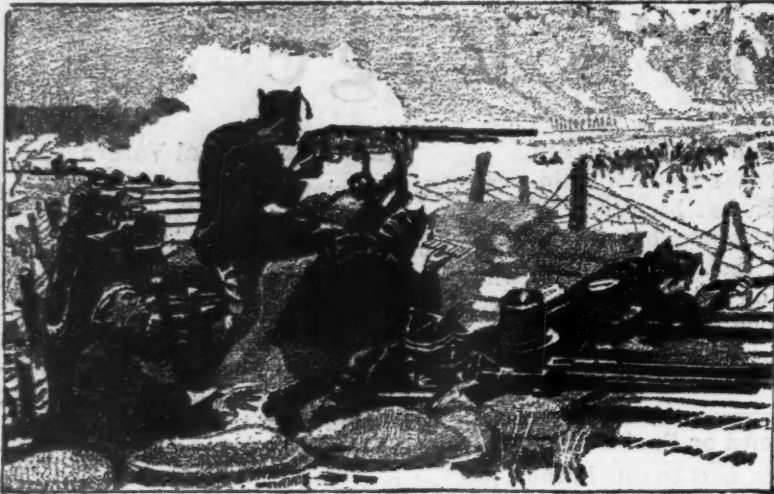
Steadily gaining in favor is the type of education which has in mind the circumstances that will later surround the student. Its prime object is to turn out men and women fitted to make the best use of life as they find it. In choosing a friend are we going to be guided by his opinion of himself, or by that of his acquaintances? The second will insure us a more pleasing companion, but in the acid test of trouble or perplexity we turn surely to the one who, we feel instinctively, is approved by God. When the test is applied to education, the men who can best answer the demands that life makes upon each one of us, count for most. The gentleman and scholar, and the cultured person are not necessarily excluded from that choice company.

## Our Country and Theirs

**T**HE Kaiser richly rewards a woman who has lost nine sons in the war, by sending her a framed autograph picture of himself. Can Kaiserology give her comfort in such a gift? It is not for a free-born American to know.

His letter, lately printed in the daily press, side by side with Lincoln's letter written to a woman during the civil war under similar circumstances, sharply draws the contrast between the spirit of the government we are fighting to maintain and the autocracy we would rather die than live under.





## When Belgium Stemmed the Tide

Four years ago the Belgian Army, war-worn and weak in numbers, confronted the Germans on the Yser. From Liege to the last narrow strip of their country they had resisted the invaders inch by inch, glorious even in retreat.

At the Yser the Belgians performed a signal service to the Allied cause by holding the Germans while the gaps were being closed in the Franco-British line to the rear.

Four years have passed, and the same nations are still at

death grips along the Western front. America, too, is there, and has this opportunity because the Belgians kept the enemy from crossing the Yser long ago.

The same unfaltering courage, the same inspiration for sacrifice in our army abroad and in our citizens at home will give us victory.

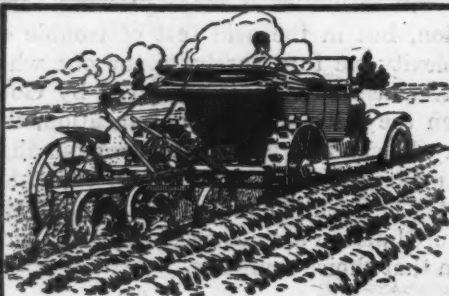
The complete mobilization of the whole people is necessary and the telephone service has an increasingly important part in speeding the national effort.

More than 12,000 members of the Bell System are in military service. Those that remain at home must fill the gaps and do their utmost, with the co-operation of the public, to help win the war.



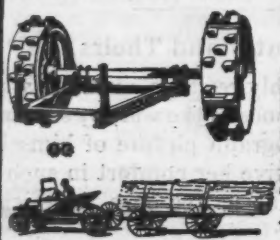
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It was the Pullford attached to Ford cars pulling two 12-inch plows running on Keweenaw, equipped with new fan device, that made a most successful demonstration at Fremont, Nebraska.

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## Fall Preparation for Bees

By E. R. Root, Editor of "Gleanings in Bee Culture."

**W**ITH the management the fruit grower has given his colonies, it is quite possible that he will have, in his brood nests, enough honey for wintering. But to make certain of this he should investigate his colonies this month. Or if there is a good fall flow in his locality, such as buckwheat, goldenrod and aster, so that the hives are filled with brood, it would be advisable to wait till next month before attending to the winter stores.

For successful outdoor wintering in the northern states each colony should be provided with from 25 to 35 pounds of sealed stores. In the south 15 or 20 pounds more will be required.

An examination of the inside of the hive will show the outer combs filled with honey and the central combs with a fringe of honey around the edges and a circle of brood or empty cells at the center. This arrangement of brood or empty cells at the center of the hive should not be disturbed as it furnishes the bees with a fine clustering place for winter. Since a Hoffman frame contains from 5 to 6 pounds of honey, if well filled, it will be easy to estimate the stores of each colony. But if one prefers not to open the hive, he has one other available method. After weighing a hive containing empty combs, the hive of bees and storage may be weighed. The difference between these two weights (after deducting five pounds for the weight of the bees) will give the weight of the stores.

Any colonies that prove short in weight should be fed a sugar syrup, consisting of two parts of sugar to one of water by measure, or if fed late they may be given two and one-half parts of sugar to one of water.

Just now one may experience more or less difficulty in obtaining the sugar, and therefore if his colonies have no disease, he should have fed back honey rather than sugar. Those obliged to use sugar should apply to the State Food Administration, Sugar Division, for application blanks, which should be filled out, and together with a statement of the amount fed last fall, their number of colonies, the average crop this year, and the amount of sugar needed per colony, should be sworn to before a notary. (In some of the states one may need to apply to the local Food Administrator for a blank.) It would also be well to state that every pound of sugar fed this fall will probably result in from one to ten or more pounds of honey next season. Upon receipt of this sworn statement, the administrator will issue a permit to buy, which upon presentation to the grocer or wholesaler will result in the purchase of whatever sugar the dealer is able to spare.

To feed this syrup, the cover of the hives should be removed and the tops of the brood combs exposed. Over this lower story should be placed a bee escape-board from which the escape has been removed. On this an empty super (same size as the brood chamber) should be placed and a friction top feeder of syrup inverted over

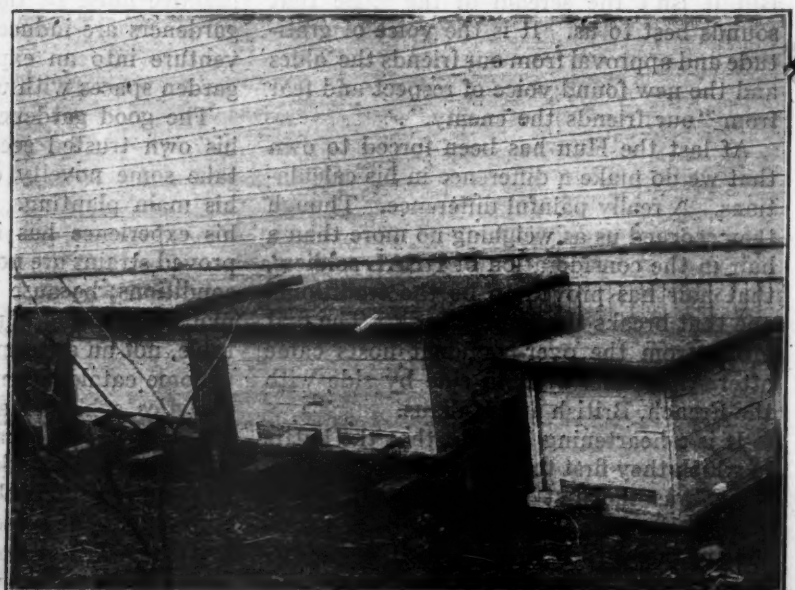
the opening in the escape-board. These feeders are simply ordinary 5 to 10-pound friction top pails having lids punctured with about 130 holes made with a machine or 3-d wire nails. If no escape-boards are available, the feeders may be inverted immediately over the center of the brood nest and the pail and tops of the frames covered warmly with burlap. Probably all the requisite feed may be given at one time. If not, twenty-four hours or so later another feed may be given.

Those having a good vegetable cellar adjoining the furnace room have ideal conditions for cellar wintering, and immediately after the first snow flies should place their bees in the cellar since bees in the cellar use only about half as much stores as those wintering outside. The cellar should be made dark and the colonies given a large entrance the full width of a hive. During midwinter, in order to provide sufficient ventilation, it may occasionally be necessary to leave open the cellar door leading into the furnace room.



All colonies left outdoors should be well packed although less packing will be needed in the south than in the north. In general we advise a packing of fine shavings or dry forest leaves, using five inches on the sides, two or three on the bottom and from five to ten on the top. Perhaps the best arrangement is to pack each hive separately, using boxes just the right size or else making individual packing cases allowing space for the required amount of packing. The packing case should be covered with roofing paper since the case must be kept perfectly dry all winter.

In those cases in which several inches of bottom packing is used, a very small entrance will suffice. A round hole one inch in diameter, with a nail driven through the center to prevent the entrance of mice, will provide all the entrance that is necessary and this small entrance, together with the bottom packing, will enable the bees to keep their hive warm even in zero weather. The best winter protection also demands a good windbreak of buildings, shrubbery or especially designed fence having one-inch openings between boards about a foot in width. Such protection as this, it is apparent, conserves a large amount of stores that would otherwise be expended in keeping up the warmth of the colony.



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## California Furnishes Trees and Seeds for France

By Earle William Gage, New York

California horticulturists have put new vim into the aid which America is giving the Allies in their war to make the world safe for democracy. For a generation her fruit experts have been gathering rare fruit and seed species from the ends of the earth, until today the Golden State has become the garden spot of the most diversified fruit culture found anywhere.

When the Germans made their retreat across northern France, they felled every fruit tree in sight. Nowhere else could the French people look for trees with which to replace this loss except in California, the only place where their rare trees have been successfully transplanted. Thus, California fruit men are now engaged in gathering together 1,500,000 two-year-old French prune trees for shipment to northern France, where they are to be used to rehabilitate the fields and orchards devastated by the Germans. They are also preparing to send the French farmers 5,500,000 pounds of seed beans.

The beans are of the pink and black eye varieties, and the quantity is sufficient to plant nearly 70,000 acres. The prune trees will convert 15,000 acres into bearing orchards within two years.

### France Gave First Prune Trees

There is considerable sentiment in California's sending young orchards to France, since it was this war-torn country that gave the state its first prune trees. This was back in 1856. Since that time the California prune orchards have covered nearly 100,000 acres, and bring to the growers more than \$10,000,000 a year.

This is a satisfactory answer to those who say America is in the war with selfish ends in view. It would have been comparatively easy for the California fruit growers to have refused to permit a single California fruit tree to be exported to France, since these farmers are well organized. They could have held a corner on the world's production of rare prunes. But their patriotism is without a price mark, and they were eager to replace France's depleted fruit orchards.

Should an average crop of beans be raised from the California seed, it will mean an addition to the food supply of France of more than two and one-half pounds of beans to each of the 40,000,000 inhabitants, and will furnish a nourishing food for the war-torn people.

### DUSTING EXPERIMENTS IN ONTARIO AND MICHIGAN

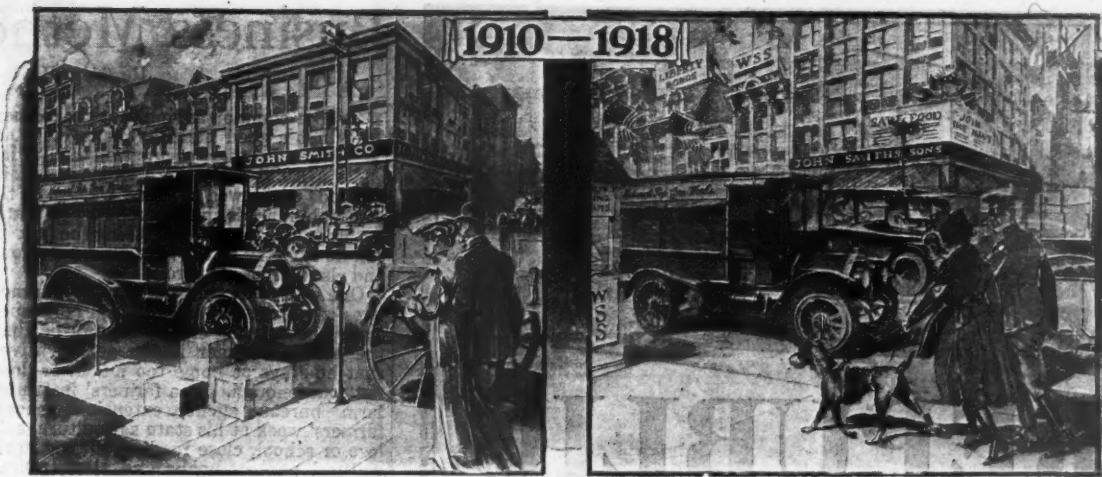
At the last meeting of the Ontario Fruit Growers' Association, Prof. Caesar, Provincial Entomologist, said that his conclusion, after careful experiments with dusting and liquid spray, was that when labor is as scarce as it is this year, the orchardist should dust. On large trees he had found dusting to be seven times as rapid as the liquid spray even when the later was applied with a power outfit.

The cost of dusting was greater on small trees and about equal on large trees. In the last two years dusting has given just as good results as the liquid lime-sulphur and arsenate of lead, but in seasons favorable to the development of apple scab, the dust spray is inferior.

It is highly important that the dusting should be done thoroughly and at the proper time. Ideal conditions exist when the leaves are moist enough for the dust to stick but not wet enough for it to run off. From New York, Nova Scotia and Michigan, Prof. Caesar received reports of success with dusting, but he also had reports of failures.

The Michigan Agricultural College publishes the result of a three-year experiment with the dust and liquid spray for apple scab. The first two years the result favored the liquid spray. In 1917, however, the dusted plots showed only 10% to be infected with scab as against 14% infected in the liquid sprayed plots. More efficient application, finer materials and more timely applications are supposed to explain the greater success of dusting in 1917.

You have something somebody wants. Advertise it in the AMERICAN FRUIT GROWER.



In 1910, Mr. M. L. Pulcher, Vice President and General Manager of the Federal Motor Truck Company, personally accompanied the first Federal to its destination in Lynn, Massachusetts. There its purchaser, the National Pop Corn Works, put it to work and it has been working uninterruptedly ever since — its record for performance so nearly 100% perfect as to seem almost incredible.

## The First Federal is Still on the Job

Eight years spans practically all of the history of motor trucks.

In that time, the first Federal has witnessed a complete revolution in haulage.

It has seen motor haulage practically supplant the horse and open the way to a broader commercial growth.

It has seen the motor truck come to the rescue in a war-time crisis when freight congestion swamped the overburdened railroads.

It has seen the first small Federal factory grow to a mammoth plant and the name "Federal" on the

radiator become a national institution in itself signifying sure, efficient haulage at lower costs.

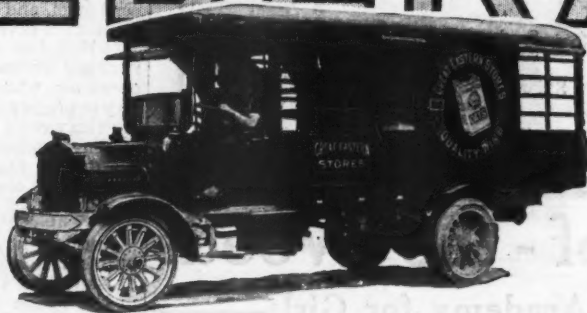
The record of this first Federal's eight years of successful service differs from Federals following it only in length of service. Each one has contributed its share to reputation for efficient performance and general good will that Federal now enjoys.

Federal, therefore, takes a peculiar pride in this forerunner of Federal success, justifying as it does in its faithful service day in and out, the early ideals which animated Federal builders.

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Guaranteed One Year: Must wear 12 months or replaced free! A prospect in every home. Often sold dozen pair to one family. Repeat orders make you a steady income.

Easy Sales—Big Profits Work spare time or full time. Any man or woman can sell this wonderful line of guaranteed hosiery at less than store prices.

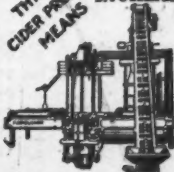
Silk Hose Free—Try our hosiery before selling it. Write quick for particulars and state size of hose worn.

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### Save Your Fruits and Vegetables

What you don't eat now, keep for next winter by using the

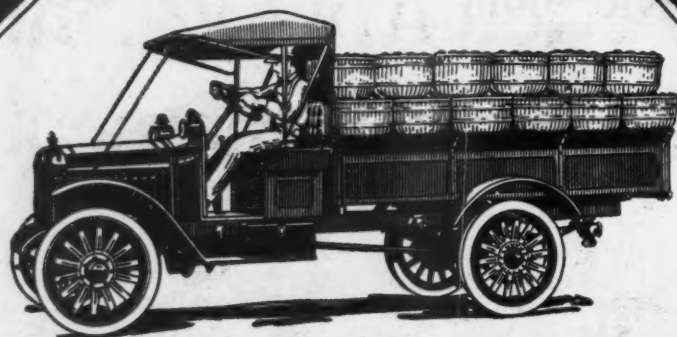
### "GRANGER EVAPORATOR"

No sugar, no jars, no cans. Thousands in use endorsed by U. S. Government. Send \$4, check or money order, with parties concerned or money back. You save the cost several times over on sugar and cans. Write for booklet "Feed Will Win the War." SAVE IT.

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## REPUBLIC

### Internal Gear Drive

## MOTOR TRUCKS

**Save  
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Labor  
on the  
Fruit  
Farm**

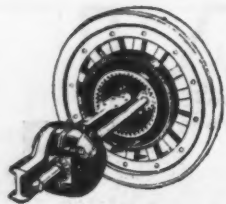
Fruit Growers who own Republic Trucks don't have to depend on extra teams to help them out when the rush of getting fall crops to market is on.

Republic Trucks are a profitable investment for any fruit grower. They are built with the extra strength and durability that insure their working for you day in and day out in any kind of weather.

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This saving in unsprung weight means longer life to tires and important savings in gasoline and all other upkeep expense. 45% greater road clearance makes these trucks travel any country road easily without fear of stalling even in mud and snow.

Republic trucks have been proved efficient in every kind of hauling. Last year Republic produced and sold more than twice as many motor trucks as any other maker.



The Internal Gear Drive delivers 92% of the motor power to the wheels. We know of no other drive that delivers as much.

More than 1300 Republic Service Stations distributed all over the United States, back up Republic quality.

Seven Models— $\frac{1}{4}$  ton to 5 ton.

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## Business Methods in Orchards

By W. H. Jenkins, New York

IT IS a common saying that the farmer is not a good business manager; that with no other occupation could he make a living if he were as slack in his methods or allowed so many wastes. The deplorable fact is that there is much truth in this adage, and the best thing the farmer can do is to try to improve his reputation, and also increase his profits.

One way to do this is to study the practices of successful business men and especially the farming class. It may be that the average farmer is too conservative; that he stays at home too much, or does not read enough. The farmers' institute, farm bureau agent, extension school, farmers' week at his state agricultural college or school, close reading of good agricultural papers, books and the publications of state institutions, would open up a new world for him, and he would see there are things he can do, at perhaps small cost, that make the difference between profit and loss for his own farm work on the farm. It pays financially as well as in many other ways to be open-minded.

### A Better Orchard

Better than statements of principles is some specific instance of enlarging dividends, by putting a farming business on as intelligent a business basis as a well managed factory or store. The instance I have selected is orchard farming as practiced by the Tonoloway Orchard Company, located at Hancock, Maryland. This is one of the largest orchards in the United States. It contains many thousand fruiting trees.

The manager of this orchard is J. A. Cohill. I heard him tell some of the ways in which he had reduced expenses and made the stock of the orchard company a good investment, and will quote him as follows: "I am employed by business men who would not tolerate their investment being handled by guess work. And it would seem to me that the average farmer or fruit grower has the same reason to know where he stands concerning the costs of producing his crops.

"I want to tell you of a case where I saved the orchard company which I manage one thousand dollars. Our orchards are located on a steep hillside. It cost us \$1,800 to spray once each year for scale, with lime and sulphur. I think the orchard is about as immune from scale as it possibly could be; however, in spots here and there we had some, and the stockholders felt that it was necessary to spray every year for protection. When the picking season began in 1914 I furnished my picking foreman with ordinary shipping tags and on each tree which had any scale, a tag was tied to a lower limb. Last spring, 1915, instead of spraying the entire orchard, we simply sprayed the tagged trees; gave them a complete drenching. The cost of this work amounted to \$800, thereby saving an even \$1,000.

"In 1914 it cost us thirty-six cents to pick, pack and deliver a barrel of apples to our railroad station. In 1915 the cost was twenty-six cents, a difference of ten cents per barrel, and on a crop of 27,000 barrels it meant a saving of \$2,700. Some difference that, but we might never have known it unless we had the detailed cost of each operation, which afforded us an opportunity to plug our leaks. One way of making this saving was the use of a low-down hauling wagon, so one man could load the apples, and another was grading the roads so we could draw larger loads."

### Saving on Barrels

Another large saving in this orchard business was on packages. Do farmers consider how they could have a shop and in the winter get containers for produce ready for use? That is what Mr. Cohill says:

"Two years ago we began to feel the need of a better barrel in which to pack our fruit. We had been paying our local cooper thirty-five cents each for barrels made of knotty staves, and poor quality of hoops. We demanded him to supply us with a barrel made of clean, white, number one staves, free from knots, and a better quality hoops. He would not sign our contract for such a barrel for less than forty cents each.

"We cut loose from him, made our own barrels, used the best quality of material obtainable and did so for twenty-nine cents each. This change saved us \$2,970,

gave us as good a barrel as money can buy, and also relieved us from much worry.

"We began making them in the slack season and had every barrel made up and stored away before picking began. The equipment for making barrels is very inexpensive and coopers can be obtained to make them by contract for five cents each, so, for any grower having a crop of, say, 5,000 barrels, I think he will find it practical to make his own barrels for three reasons: First—He will save money. Second—Get a better quality package. Third—Find much relief in having them when he needs them."

### Systematizing Labor

On even the small farm too often there are no regular working hours, and when one is ready to begin work, something gets in the way of putting in full time. Mr. Cohill told how he prevents such small losses.

"Another important feature of orchard management is to have an organized system of handling your men. The labor problem is one for the small grower as well as for the larger ones, and he should be just as eager to relieve himself of these difficulties, as the larger grower employing many men.

"I live in the center of the orchard. In the morning I took a visitor up on the hill where we could not be seen by the men, and by a quarter of seven the men with teams came along, hitched to their cultivators, and sat down. Promptly on the dot at seven the boss teamster yelled 'all up,' and every team started to move. The visitor told me that some of his men often were late getting their teams to the field; others found excuses to fix their harness or repair their cultivators, and that any time between six-thirty and eight o'clock the men would really be going to the field. Before he left that day he admitted that he knew his trouble—no system. We work ten hours, no more, no less. Every team and every man must start at seven and stop at six; no matter how rushed we are, ten hours is considered a day.

"We always try to 'kill two birds with one stone,' if possible, so while we are hauling pruned limbs away, we also haul out any loose stumps, logs and trash of any sort."

### A Saving in Wages

I remember that Mr. Cohill told how he had reduced the labor cost of apples by employing girls instead of men to do all the work suited to them and saved one-third on wages, on all the work they did. They did all the work in the packing house except heavy lifting and did it better than men. They soon became expert graders, packers and facers, and they stuck to their job.

Mr. Cohill demonstrated that it pays farmers to attend conventions and improve all opportunities to study this business. In the orchard there were 1,000 trees that should have been bearing several years. All the fertilizers and tillage spent on them made only large wood growth. Mr. Cohill wanted to add the fruit from these trees to the income of the orchard plant. After investigating and studying the subject of non-fruiting trees of a bearing age, he heard it discussed at a horticultural convention. Some one told how summer pruning had brought trees into bearing. Mr. Cohill went home, pruned the trees mentioned against the protests of old experienced orchardists, with the result that the next year the trees bore profitably. I will try to repeat Mr. Cohill's own words.

"We have found summer pruning to be entirely practicable and now, as a matter of course, include it with our annual work. It not only has a tendency to bring trees into bearing early, but in some instances actually increased the yield for us and has given us better color. I should not advise summer pruning on every variety, because, apparently, on our early summer apples the work didn't seem to indicate the tree was inclined to bear any earlier.

"In no case have we seen any bad results from summer pruning in our orchards, so why the average fruit grower should be so cautious about it I cannot quite understand. The proper time to do this work is as soon as the terminal buds have set, which indicates that the tree has about stopped growing for the season. The most favorable time seems to be between July 15 and August 15 in our section."

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## Peach Tree Spraying

By F. H. Sweet, Virginia

After one has said all that one can say about other orchard operations, the real success of the enterprise finally depends on proper methods of spraying in order to save the crop and insure a profitable return. In these days it is almost impossible to grow a crop of fruit that will bring profitable returns without proper spraying. Perfectly sprayed peaches gave a net return of \$2.38 per six-basket carrier in one market the past season, while the same variety not sprayed, and packed, shipped in the same car, brought scarcely the price of the package alone.

As a general rule all peach trees should have an annual spraying during the dormant season, of winter-strength concentrated lime and sulphur, using one gallon of the concentrated solution with eight or nine gallons of water. This destroys scales and the spores of many fungous diseases, such as scab, leaf curl and brown

### Successive Sprays

The next spray consists of self-boiled lime-sulphur, or hydrated lime-sulphur, a new stone-fruit spray material made from hydrated lime and sulphur. This is applied just after the blossom petals have dropped. Two and one-half pounds of paste arsenate of lead, or half as much powdered arsenate of lead, are added in order to destroy the peach curculio, the insect that causes wormy peaches. This spray is repeated as soon as the shucks have fallen, with the lead added, and again without the lead a month before the fruit is to ripen.

If the season is one of excessive rainfall, another spray, between the last two mentioned, is often advisable. Do not use lead except for the first and second applications mentioned after the bloom. It is often advisable to make this extra application on the late maturing varieties in ordinary seasons, as these varieties are frequently exposed to infection from earlier maturing sorts. All the above applications are not always necessary, but a lighter schedule is likely to cause trouble in unfavorable seasons.

### THREE MAIN PRUNING POINTS

Among the multiplicity of directions for pruning, most of them valuable and advisable for the fruit grower to know and practice, there stand out three main points which must on no account be neglected.

First—Greater insistence is laid continually on the value of removing many small twigs and branches instead of cutting off large ones.

Second—In regard to water sprouts, they should be removed, but not always all at once, for if the growth of water sprouts is very heavy and all are removed at one time, a second crop of them will appear. They are in almost all cases due to over-pruning, and serve as a warning to the fruit grower.

Third—Do not remove the fruit spurs along the branches, leaving only clumpy ends. A trip through an old orchard section will prove the importance of impressing this forcibly upon the novice in pruning. Nothing is less pleasing to look upon than an apple tree waving a series of "mule tails," which can produce fruit only at the end of the boughs, and which expose the bare branches to sun scald and to breaking from an overload of fruit at the tip.

### NO IDLERS ALLOWED

A new field for the farm demonstration agent has been developed in some parts of Oklahoma. It adds greatly to the usefulness of the agent as it goes far toward solving the labor shortage problem.

The agent is empowered to put the alternative "Work or Jail" squarely up to every vagrant and idler. Farm work becomes suddenly and remarkably attractive when this choice is presented. The agent promises to use his best efforts to secure a job for every willing man, and as he is aware of the needs of farmers throughout his district, he is prompt in filling this promise.

County and city authorities agree to feed the men while they are waiting to be placed. They work voluntarily, on the same terms as other laborers. But they don't loaf in that district. They work or get out, or get in—if they prefer jail.

# You Sit Where You Always Sat On the Seat of the Implement



**YOU** wouldn't think of riding on the back of one of your horses while at work in order to guide your team. If you did you would require another person to operate the implement, because implements require constant attention.

Then why attempt to operate a tractor in a manner which your experience has proven impractical? It is just as illogical to ride on a tractor in front of the implement and expect to operate the implement from that position as it is to operate the implement from the back of your horse.

Any way you look at it you are working at a disadvantage with the ordinary tractor. To do the best work two operators are required, one on the tractor and one on the implement. In these days of extreme labor shortage this is a tremendous handicap. With the operator on a tractor in front of the implement it is manifestly impossible for him to give the implement attention and make adjustments for varying field conditions without losing time.

### Just Like Driving Horses

With the Moline-Universal Tractor you sit on the seat of the implement and have perfect control of both implement and tractor. You are in the best position to observe the work, make adjustments and manipulate both tractor and implement. This holds true regardless of the work being done—plowing, disc-

ing, harrowing, planting, cultivating, mowing, harvesting, both grain and corn.

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The One-Man feature is just one of many advantages the Moline-Universal has over other tractors. It is the only tractor which will do all farm work, including cultivating. It is the only tractor regularly equipped with self starter and electric lights. Non-robust labor can operate the Moline-Universal successfully, and it can be worked day and night.

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unusual power, and is economical in operation. It is conservatively rated at 9-18 H. P. Oil is forced to crankshaft bearings under 35 lbs. pressure. Gears are steel cut, drop forged, and heat treated. All shafts are splined. Every working part is easy to get at, and every moving part is enclosed.

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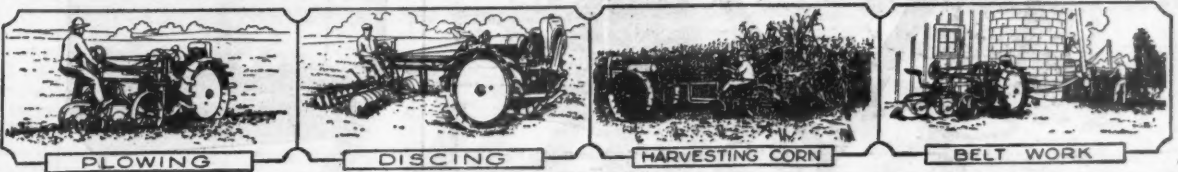
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## W. Barret Hankins Says— Saving Steps is Important Now.



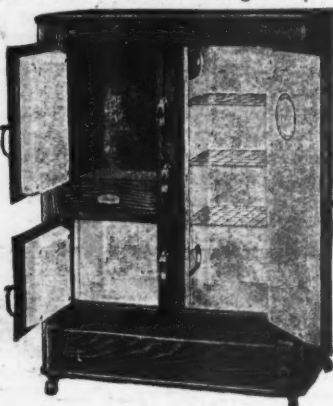
**W**EARY feet from useless steps are not conducive to willing hands or ready minds. Every ounce of energy you can save by cutting down the number of unnecessary steps taken during the day is vital to the effective performance of the increased amount of hand and brain work you are called on to do today.

I believe you will be enthusiastic over the articles I have tested and approved for you this month, for most of them call for only one step where before you took three, and all are calculated to put your homes, and yourselves on a 100 per cent efficiency basis.



Test and Approval No. 107 is something for the baby, whose comfort and health largely determine the service rendered by the home. This crib is a combination of a complete crib, bassinet and play pen, and affords protection and comfort to the little tot both indoors and out, Winter and Summer, in its safely screened sides and permanent wire-screened top and bottom. Its real compactness in folding, enclosing mattress, makes it easily carried about the house, out under the trees or taken for a day's outing, and its dainty design and sturdy construction is especially appealing.

The U. S. Department of Health recommends such cribs strongly, as they keep the baby safe and happy, and save you the many steps necessary in running after the child, giving time for other important details of household management.



Test and Approval No. 108 is designed to conserve your time and lessen your anxiety as to the proper care of foodstuffs. A cleanable refrigerator, placed in a convenient location to save you many steps and much labor, keeps butter, milk and other foods properly chilled until they can be eaten.

If ice is not to be had in your immediate vicinity, you can easily obtain it from the nearest town if you or your neighbors have an automobile. Ice manufacturing plants are being distributed throughout the country, so that the problem of obtaining ice nowadays is a very simple one, and the amount saved in food and in labor added to the comfort and convenience of the Refrigerator, more than pays for the slight cost of the ice.

Test and Approval No. 109 is a clothes dryer, which, like the Refrigerator, will save many steps. Instead of having to stretch lines from pole to pole in different parts of the yard—and you know how often the line gets tangled, how often it

drags in the grass and gets dirty before you have it all up—you simply carry out this Dryer, set it up in a minute in its proper place, and everything is ready.



Lugging heavy clothes baskets up and down the yard, digging pathways through the snow in the Winter—wet feet from damp grass on Summer mornings—all these are done away with. You set your basket of clothes down in one spot, and hang out the whole basketful without moving a step.

No clothes poles are needed, as the Dryer is complete in itself and safely supports its full capacity of clothes on the windiest days.



Test and Approval No. 110 is a combination table and service wagon with an extra glass tray for the top, two wooden tray shelves underneath to bear all the tea or supper fixments, and a little sliding drawer to hold the linen and silver. Instead of one curved handle there are two flat handles, one at either end, making it more convenient and better looking and easier to use as a table. While it is primarily used for tea or as a service table, it can be used for a game of cards, for a writing desk or for any purpose to which a table can be put.

The three shelves and service tray make it possible to take all the dishes to and from the table in a single trip. It will help to set free your time and labor for more productive work than walking two or three miles a day between kitchen, pantry and dining room.



Test and Approval No. 111 is a broom made by an improved process, which makes it wear longer than ordinary brooms. The fibres always point down naturally, so there is no tendency to spread or sag. The tip is soft, full, round, even-sweeping, compact and practical. It wears straight, and the fibres do not break, for they are under no strain, and are protected by the top which is placed over the steel clamps that forcibly hold the fibres together. The handle, made of hard maple, shaped and polished, is easy to hold. The broom is lighter than the average broom.

Test and Approval No. 112 is a fibre container made from the purest of wood pulp. After being formed it is submerged in a hot refined paraffin bath, thus insuring that every particle of surface inside and outside, all edges and corners become thoroughly soaked and coated with paraffin. This coating insures waterproof qualities, and prevents possible ptomaine poisoning often experienced where tin is used.

It is compact in form, light of weight



and capable of an air-tight seal. Any crest, printing label or trade-mark can be accurately duplicated directly upon the package, without the necessity of an extra wrapping or branding label.



For dairy products—such as milk, cream, cottage cheese, ice cream and buttermilk, this container is most satisfactory. It is 90% lighter than a glass bottle, and costs less as there is no return handling.

Evaporated or dried foodstuffs are stored perfectly in this container, which has the added advantage of resisting to over 95% the attacks of gnawing insects.

The trade names of manufacturers of articles approved in these columns are not printed herein, but same can be obtained by writing directly to W. Barret Hankins, American Fruit Grower, Chicago, Ill., and enclosing a 3-cent stamp for reply. Interested readers should write to Mr. Hankins for the name and manufacturer's address of approved appliances, and upon receipt of the desired information communicate directly with the manufacturer for catalogs, prices, etc.

#### PRUNING ORNAMENTALS

Q. How should I prune my shrubbery that was planted out last spring; some of the branches are rather long and straggly? Also advise about pruning my big shade trees which are about twenty years old and are Silver Maples.

A. In regard to pruning your shrubs—plan should be to produce a bushy growth and to do this it is advisable to head back a part of last season's growth so as to make the shrubs more bushy. Don't head back too severely but just cut them back moderately.

In regard to your big maple trees: Cut out all the dead wood and then if you want to head them in you can do this, but don't make the mistake that is so often made of dehorning these trees. Some people will cut the big limbs back to large stubbs, and very often it is such a shock to the tree it eventually kills it. However, a thinning out of the thickest branches and a moderate heading-in will do no harm.

As a rule, most shade trees should be allowed to grow naturally so they will take on their natural appearance; for instance, an American White Elm tree will grow so that if left to grow naturally will form a vase-shaped tree with the outward branches drooping toward the ground. It is better to co-operate with nature rather than against it.

#### PRESERVING EGGS

The preserving of eggs in water glass is becoming a general practice. The wisdom of the practice arises from the fact that the cheap eggs of early summer can be put away to be used in fall and early winter when fresh eggs are commanding high prices. As this method of preserving is absolutely reliable no one is running any risk in trying it. These preserved eggs are just as good as fresh eggs for all kinds of cookery and all the fresh eggs of fall and winter can be sold at fancy prices. Those eggless recipes can be passed on to those who did not put down the family supply in water glass.

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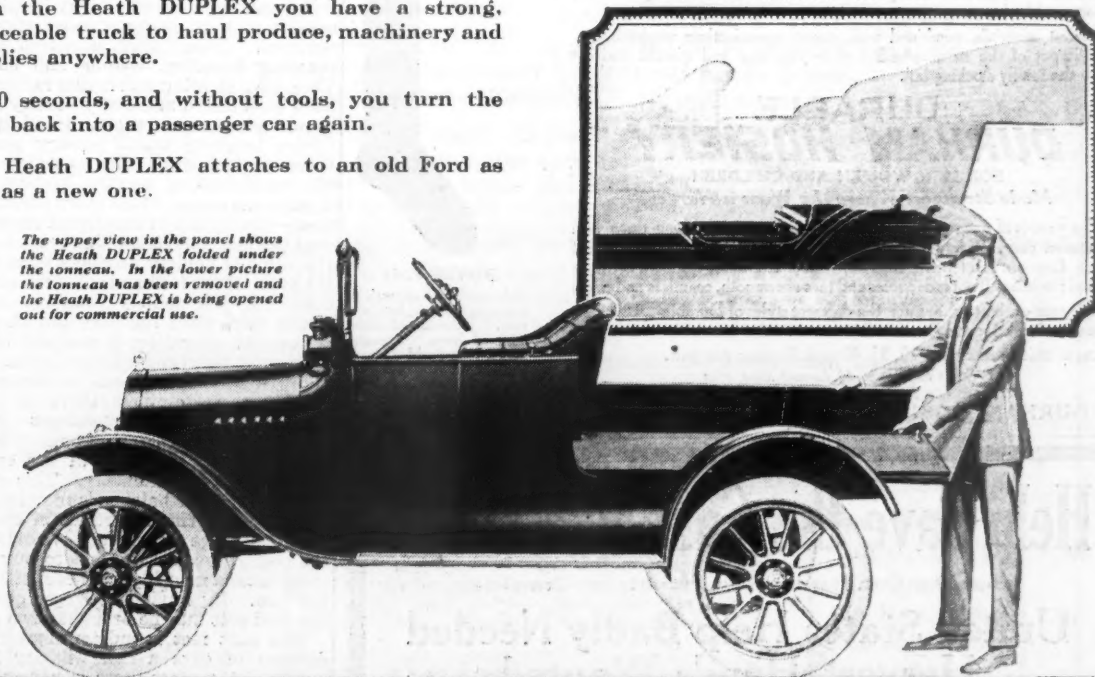
The Heath DUPLEX is never removed. It simply folds under the tonneau when you want a passenger car, and opens out—after the tonneau is lifted off—for trucking purposes.

The folding delivery body has a carrying space 4 feet 4½ inches long, 32 inches wide and 10 inches deep.

In these times, when a day is all too short and extra labor can hardly be hired, it behooves every farmer to see, as soon as possible, how much the Heath DUPLEX would mean on his own farm.

There is doubtless a Heath DUPLEX dealer in the nearest town, who will gladly give you a demonstration. If you write us we will send you his name, also descriptive literature.

McCord Manufacturing Co., Inc., Dept. 8, Detroit, Mich.



The upper view in the panel shows the Heath DUPLEX folded under the tonneau. In the lower picture the tonneau has been removed and the Heath DUPLEX is being opened out for commercial use.

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## Poultry for Profit



### The Poultry Crop

By C. A. Langston, Editor "Poultry for Profit" Department

THE midseason estimate of the poultry crop places production at 19 per cent of normal. As this estimate was probably based on seasonal consignments of live poultry to the leading markets it should be received as somebody's guess. Another guess is that our American homes have consumed poultry more liberally than in other years and this may account for light shipments to city markets.

The reason for this decline in production is plain: The high cost of poultry feeds aggravated by the difficulty of getting feed at any price. The prolonged sagging of prices for eggs has been a discouraging feature of poultry keeping. The monthly feed cost alone of keeping a hen cannot be far from 25 cents. Eggs at 30 cents a dozen leaves too little for the poultry keeper.

#### Some Truths About Poultry

Various bulletins on poultry keeping are coming in from many sources, state and national. They offer excellent advice touching breeding, feeding and housing. They offer growing and laying rations that have been tested and every poultry keeper should adopt one of them. In addition to advice touching sound poultry practices there are numerous appeals addressed to the patriotism of poultry keepers. But there is one appeal which every person must heed—the appeal of intelligent experience. And the first and controlling maxim is that the value of poultry products must exceed the value of the feed and other maintaining costs. If the poultry products are not worth more than the feed and time consumed the operation is wasteful of both grain and time and no patriotism would approve of wastefulness in the poultry yard, for wastefulness there is just as blameworthy as wastefulness in the kitchen. The basic fact of poultry keeping is this: Every mature fowl will consume 6 pounds of feed monthly. This amount of feed in proper balance is required. The hen demands this regardless of cost. As the retail price of this feed is now 6 cents the poultry keeper who has to buy everything faces a monthly fixed cost of 36 cents per hen. By buying in larger quantities the feed cost may be brought down a little.

The next fact is indeterminate: The number of eggs a hen will lay in any month. A perfect score is not to be expected and 12 eggs per hen per month would be satisfactory production, and much above the average. A hen's 12 eggs will not pay for the feed she will consume in a month and give a profit. The conclusion of the matter is that prices are too low for current feed costs.

#### Cull Out or Sell Out

As under present conditions a single loafing hen will consume the monthly profit of 11 others, it behooves the poultry keeper to exercise unusual care in culling. All two-year-old hens should be disposed of. They would not lay enough eggs to pay for their feed. Only the best yearlings should be carried over. In deciding which are the best do not be deceived by appearances. The good dresser is probably a slacker. Faded coats and legs are generally the result of heavy laying.

The rules for culling pullets are different. All undersized, and maldeveloped ones, should be excluded as soon as detected. The late hatched pullets present a special problem. As they will not lay before the middle of February the chances for making a profit with them are very slim.

#### Winter Housing

The best pullets in the world given the best feed in the world will fail utterly if they are kept in improperly constructed

houses. And the majority of farm-kept pullets are not properly housed. It is wrong for the farmer to condemn his wife's poultry before he has first judged himself. The failure of the wife's flock may be due to failure of the wife's husband. He thinks he is too busy with more important matters to overhaul the henhouse, and he may not have enough grace in his heart to admit that the hen's failure is his fault. Expensive buildings are unnecessary, but at least two requirements must be met in new construction or alteration: The southeasterly side should be open; the other three sides should be wind proof. Strips over the cracks will not keep out the high winter winds, and hens will not lay unless they are comfortable.

#### An Interesting Egg-Laying Contest

Some light is cast on the problem of culling out the hens by the contest conducted by the Agricultural School of New Jersey at Vineland. All pens are retained for two years in order to compare the results of the pullet year with the production of the hen year. The present indications are that the hen pens will fall at least two months behind the pullet pens.

All of the contests show how difficult it is to select the best laying pullets. One pen at Storrs, Conn., came out of the year's contest 79 cents in debt for feed alone, and the owner of that pen thought he had picked the best ten of his flock.

The best pen in the same contest returned \$34.00 above the cost of feed. The fate of every poultry enterprise is largely decided by the kind of stock kept. The poultry keeper must do everything that is required by the best poultry experience, but no effort of his can make up for poor stock. The winning combination is good stock and wise care.

#### DUST CONSERVES FERTILITY

That a good dust mulch conserves moisture, has long been recognized. Now attention is called to the fact that the black lands of the Ukraine, which are provided by Nature with an exceedingly fine dust mulch, show undiminished fertility year after year. In Michigan an experiment is being made with the dust mulch as a substitute for fertilizers. It is said that hopeful results have been obtained so far.

#### NATIONAL DAIRY SHOW

The National Dairy Show will be held in Columbus, O., October 10th to 19th.

When E. A. Stewart recently bought a six-months-old Holstein calf for \$106,000, the record broke with a loud report.

#### WONDERFUL EGG PRODUCER

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs," and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit maker, write E. J. Reefer, poultry expert, 3656 Reefer Bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for \$1.00 (prepaid). So confident is Mr. Reefer of the results that a million dollar bank guarantees if you are not absolutely satisfied, your dollar will be returned on request and the "More Eggs" costs you nothing. Send a dollar today or ask Mr. Reefer for his free poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.



**A COSTLY EXPERIMENT**

The southern states have their climatic troubles as well as the northern states. Occasionally the frost line extends beyond the orange groves of Florida, destroying the fruit and often cutting back or seriously injuring the trees. A millionaire manufacturer from the north lost his crops by frost. This induced him to try the experiment of building a mammoth glass house over a large part of an acre of orange orchard. When down south the last time I visited this man's estate and saw the mammoth glass house, but it was in partial ruin and the trees enclosed at such great expense were feeble in growth as compared with those growing outside. Here is an example of the expense of experiments. The wealthy manufacturer saw no reason why the trees grown unnaturally under glass should not be far more productive than those grown outdoors, but he found quickly that they did not thrive as well as those fully exposed to the elements.

**BROWN ROT ON CHERRIES**

It may not be too late in some sections to control to some extent the brown rot on the late varieties of the sour cherry. It seems a great pity especially this year for those with only a few trees and who cannot afford to buy the high-priced fruit this season in the open market to lose their crop when almost ripe, when it could have been saved.

Use lime-sulphur, 1 gallon in 50 of water, a little weaker than early in the season since it is claimed that the foliage is somewhat more tender as it becomes older. Leaf spot is also prevented from becoming so serious by the application of a late summer spray after the cherries are picked, saving the premature leaf fall. This insures better health of the tree and a better crop next spring.

**POULTRY DISEASES**

The editor of this department has been unfortunate in his handling of sick poultry. And he does not know another poultry keeper who has been any more successful. Many people are great believers in the efficacy of certain remedies. Without passing judgment upon the general interest in doctoring fowls, it may not be out of place to say that many of the most successful among poultry keepers believe that the main interest should be centered upon good housing, good feeding, good breeding, and thorough spraying to keep down mites. Where these details are carefully observed there is not likely to be much need for doctoring sick fowls.

**ILLINOIS APPLE SHOW**

The Illinois Apple Show will be held in the Sherman Hotel, Chicago, November 19 to 22, 1918.

**OHIO STATE FAIR**

August 26th to 30th has been set as the date of the Ohio State Fair, which will be held in Columbus, O.

Home - Dried  
Vegetables  
and  
Fruits  
are kept  
Perfectly  
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These containers are as practical as tin and glass for the packing of dried fruits and vegetables and very much more economical. Absolutely air-tight, moisture-proof and light-resisting. All of the full, natural flavor, as well as the color and aroma of the contents are retained. Weis Containers are made of pure Spruce Wood Fibre, immersed in hot refined paraffine after they are formed. Coated inside and outside with odorless, tasteless paraffine wax. Caps sealed air-tight with simple sealing tools. Used by Commercial and Community Dehydrators, Canning Clubs, etc. Approved by Federal and State Agricultural Departments and leading Educators.

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Brings restful relief, comfort, ability to do things, health and strength.

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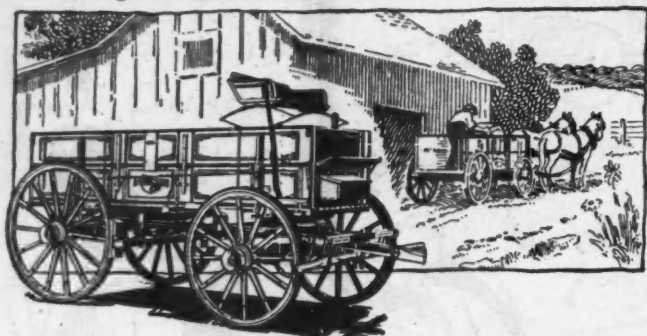
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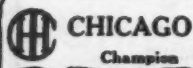
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## Important Currant and Gooseberry Diseases

By A. S. Colby

**A**LTHOUGH comparatively few in number, the fungous diseases found on currants and gooseberries are often quite serious. The most common diseases are Powdery Mildew, Leaf Spot Anthracnose and Blister Rust.

Powdery Mildew is of special interest and importance in that its presence renders almost impossible the successful growing of European varieties of gooseberries, especially in the northeast. While it does not commonly attack the currant or cultivated gooseberries it should be watched for on these plants.

On the gooseberry the first evidence of the disease is noted on the young leaves and tips of the new growth, spreading to the young fruits as soon as they form. The diseased leaves are covered with a white, powdery growth whence the name. This whitish covering also appears on the berries. At this time numerous summer spores are being borne in the diseased areas by which means the disease is scattered.

Later on in the season this powdery coating begins to turn brown and thickens resulting in a somewhat felt appearance. The diseased berries frequently appear moldy and crack and partially decay. In this dense brown felt coating are found the spore cases holding the winter spores. In spring the spores are disseminated causing infection anew. The presence of the fungus thus results in stunted growth of the twigs and useless fruits.

Excellent results have been secured in controlling the disease at Ontario by the use of lime-sulphur. The first application should be made just after the buds begin to burst, using the same dilution as for the dormant spray on apples, that is 5½ gallons of commercial lime-sulphur in 50 gallons of spray. The second application should be made as soon as possible after the leaves appear but before any blossoms open. Lime-sulphur, 2½ gallons commercial in 50 gallons of spray, should be used. The third application, as soon as the fruit sets, will call for a still weaker solution, 1½ gallons of commercial material in the same amount of spray. It may be wise to make a fourth application, using the material slightly weaker than in the third spraying, 1½ gallons to a barrel. This should be applied ten days after the third spraying.

### Leaf Spot

This disease is probably the most common one on currants as well as gooseberries. Since the branches are often defoliated as a result of the disease the maturing of the wood and buds for next year's crop is seriously hampered. The fungus lives over winter in special spore cases on dead leaves on the ground. With the approach of spring weather and resumption of growth of the currant bushes the fungus spores mature; are forced out of their winter hiding places in the leaves and blown to the young foliage. There they germinate and grow in the tissue on both surfaces of the leaves. These localized areas are evident as spots, the reason for above name. The spots are brown at first and gradually increase in size up to ½ inch in diameter. Later the central becomes pale or grayish white on which are borne spores for further spread of the disease.

As late summer approaches, the leaves turn yellow and fall and the development of the winter spore cases begins.

The fungus can be controlled by early spraying with lime-sulphur consistently followed up. The first application should be made before the buds burst, using 5½ gallons commercial lime-sulphur in 50 gallons of spray. Other applications just before the blossoms open, after the fruit is set, and immediately after the fruit is picked, using 1 gallon of commercial lime-sulphur in 50 gallons of spray material, complete the schedule. Very finely ground sulphur, 90 parts, and powdered lead arsenate, 10 parts, have been used as dust in leaf spot control with satisfactory results. The mixture is dusted on (1) when the first leaf clusters appear and at two-week intervals until August. The addition of the lead arsenate, an insecticide, to the sulphur, the fungicide, controls currant

American Fruit Grower



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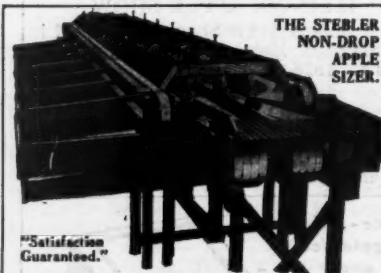
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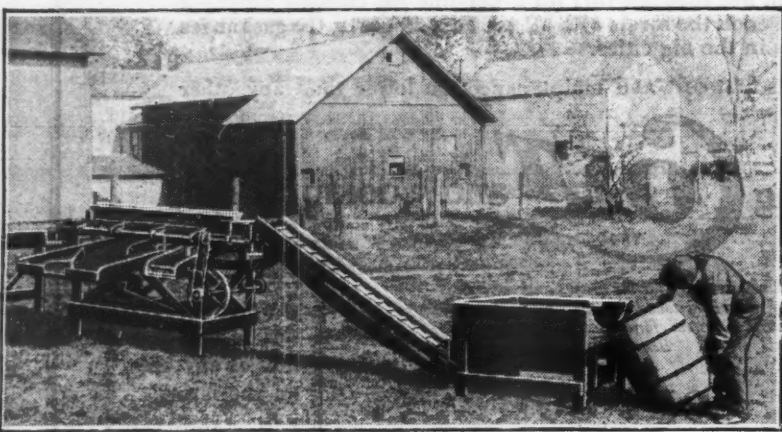
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worms commonly present. Lead arsenate may also be added to the lime-sulphur above, in the proportion of one pound of the powdered material to 50 gallons of spray when necessary for insect control. Black currants are said to be more resistant to leaf spot than red and white varieties.

#### Anthracnose

The fungus winters over in leaves and possibly as mycelium (thread-like vegetative growths) in the canes. Spores produced in the spring are probably carried to the young leaves introducing infection. The spots develop in a similar manner to those of the leaf spot and by some are confused with that disease. However the differences are distinct. Anthracnose spots are smaller in size than those induced by the leaf-spot fungus, do not have a sharp outline and the spots are usually brown in color throughout.

Later in the season another kind of spores is produced which greatly aid in disease dissemination. Both these summer spores and the winter spores first mentioned are capable of living over winter. Anthracnose is controlled in a similar way to leaf spot. Since both anthracnose and leaf spot are carried over winter by the fallen leaves the recommendation might be made to burn or plow under the leaves. As a single control measure however it has not been found adequate.

Last on the list but by far the most serious and important is the Currant Rust, Blister Rust, or White Pine Blister Rust. Introduced into this country from Europe a few years ago on white pine nursery stock, it has spread generally over northern and eastern United States and into other isolated regions westward to Minnesota.

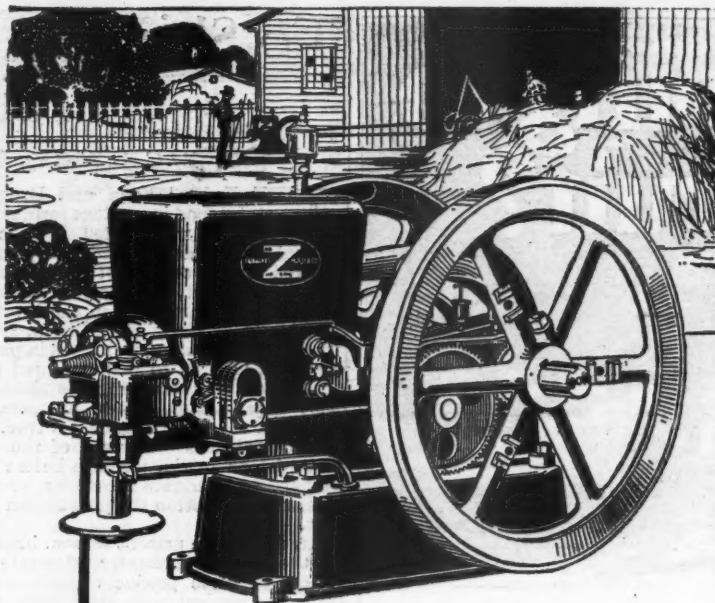
The fungus is relatively unimportant as far as the currant is concerned and even less so on the gooseberry. The important fact in this connection however is that the bush fruits, both wild and cultivated, serve as alternate hosts for the fungus, living as it does part of its lifetime on the bush fruits and the other part on members of the group of five-needle pines. Of this group the white pine is the most important.

An effort is being made to prevent the spread of this disease by establishment of a quarantine by the Federal Horticultural Board against the shipment of five-leaf pines or the bush fruits west of a line along the western boundaries of Minnesota, Iowa, Missouri, Arkansas and Louisiana. If shipments have not been made previous to this quarantine, and search is being made for such, or if the disease does not work across the continent farther north than the quarantine line, it is possible that the pine forests of the Rocky Mountain region may be preserved.

However in the northeastern states the problem is acute. Federal agents are endeavoring to stamp out the disease by detection and elimination of the bush fruits and while this works a privation on owners of small fruit plantations, let them imagine what the country would be like without the pines. Then let them resolve to do all in their power to aid in extermination of the dread disease by digging up and burning every currant and gooseberry bush possible to find. The pines will then be absolutely safe as the disease cannot live without the presence of bush fruits.

Briefly the life history is as follows: The spores, on reaching a pine tree, if lighting on smooth bark, germinate and grow into the tissue remaining hidden for a year or two. In the spring masses of yellow spores form on the outside, which are scattered by wind and other agencies for some distance. These spores cannot cause the disease on other pine trees. They die if there are no currants or gooseberries near. If however they do fall on the leaf surface of these bush fruits, they germinate at once and, growing, soon form spores in their turn. These spread the disease still further on the bush fruits alone. Later on in the season new crops of spores form which can grow only on pine. These floating about in the air may be carried to pines where they soon establish themselves on the young wood and the life-cycle is complete.

There is no known method of eradication of this extremely serious disease except by the above method and it is hoped that the fight, though perhaps tardily begun to save the white pine in this country, will be successful. We earnestly ask the co-operation of every land owner wherever this magnificent tree grows in the fight for its preservation.



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The demand for fruit, fresh, canned, and dried, will undoubtedly be heavy for some time after the war. For a number of years, the planting of fruit trees has been below normal, and not enough to meet the annual loss. Thousands of trees were killed last winter by the unprecedented cold. On the other hand, there is a growing appreciation of the value of fruit as food.

The Secretary of Agriculture went on record last year as follows:

*"It would be unfortunate if through concentration of effort on the production of quick-yielding staple food products, serious interruption in the normal planting of fruits should result."*

Mr. Houston also called attention to the fact that interplanting of tilled crops between the rows of young trees is now a general practice.

The man who grows quality fruit and markets it intelligently will reap ample reward. Local markets usually offer the best opportunity for profit.

There is also every incentive to start a home orchard now. The markets never have enough quality fruit, at least in succession throughout the season. And the flavor can never compare with that of fruit picked fresh and ripe in your own garden.

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Any way you look at it, now is the time to think about fruit. It's an important food product—a necessary article of diet, and there are always plenty of unoccupied tracts and corners where you may grow a few more apples, peaches, pears, plums, or cherries—there is some corner for grapes, strawberries, rhubarb, or asparagus. The finest trees and plants will not give the best returns without proper care and attention. Whether you wish to grow fruit to sell or to supply your own table, your success depends upon yourself. The first thing to do is to start right.

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"Fruit Trees and Plants" will help you. It tells how to select the best site, how to choose the varieties adapted to your soil, climate, and purpose, when to plant and other valuable information. All you have to do is to ask for it and then use it. *This book is free.*

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Growing" (10 cents enclosed)

*For big markets*

"How to Beautify your Home  
Grounds" (10 cents enclosed)

*For local markets*

*For home use*

Approximate number of trees ..... of plants .....

Name .....

Address .....

(Please give County and Street or R. F. D. number)

## To Shippers of Fruits and Vegetables

By C. L. Alsberg, U. S. Department of Agriculture

**T**HE Federal Food and Drugs Act states food in package form shall be deemed misbranded if "the contents be not plainly and conspicuously marked on the outside of the package in terms of weight, measure, or numerical count." This provision of the law is applicable to products of the farm, such as fruits and vegetables, if shipped in package form, as well as to manufactured foods.

Shippers of these products should see that bags, crates, boxes, hampers, and packages of other kinds bear a true, plain and conspicuous statement of the quantity of food in the package before being shipped in interstate commerce, or otherwise brought within the jurisdiction of the Act.

If, during the present season, inspectors of the Bureau encounter interstate shipments of these products which are not properly marked with statements of net contents, official samples will be collected and appropriate action taken under the terms of the Food and Drugs Act. Specific information regarding the method to be employed in marking containers of fruits and vegetables follows:

The following suggestions are made in response to numerous inquiries for information as to the proper methods of marking the quantity of the contents on packages of various fresh fruits and vegetables under the Net Weight Amendment to the Food and Drugs Act.

The articles listed below may be marked by either weight or dry measure, or when packed in barrels, in terms of the United States standard barrel and its lawful subdivisions, i. e., third, half, or three-quarters:

Apples in barrels, boxes, cartons and hampers. Cases or cartons containing graded apples may, if desired, be marked in addition with the number of apples per package.

Apricots, prunes, and plums in baskets, boxes and cases. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Beans (in pod) in baskets, boxes and hampers.

Berries and currants in baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Cherries in boxes and baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Cucumbers in barrels, baskets, hampers, boxes and crates. Containers of graded cucumbers may, if desired, be marked in lieu of weight or dry measure, with the number and length of the cucumbers.

Grapefruit in sectional cases. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Grapes in baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Lemons in sectional cases. If desired cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Okra in baskets, boxes and hampers.

Onions in crates, baskets and hampers, and in sacks of uniform quantity of contents. Cases containing graded onions may, if desired, be marked in addition with the number of onions per case.

Oranges in sectional cases. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Oranges, satsumas, and tangerines in half boxes. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Peaches in boxes, cases, baskets and hampers. Boxes and cases of graded peaches may, if desired, be marked in addition with the number of peaches per package. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Pears in barrels, boxes, baskets and hampers.

Peas (in pod) in baskets, boxes and hampers.

Peppers in barrels, baskets, boxes and hampers. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Potatoes in barrels, crates and hampers, and in sacks of uniform quantity of contents.

Quinces in barrels, boxes, baskets and hampers.

Squash (southern) in crates, boxes, baskets and hampers.

Tomatoes in boxes, "lugs," and baskets. (When packed in small open containers inclosed in crates or "flats," see next paragraph.)

### Small Open Containers

Pending a determination of the question as to whether the quantity of the contents must be marked on small open containers, inclosed within crates or "flats," in which small open containers are packed apricots, berries, currants, cherries, grapes, peaches, plums, prunes, peppers and tomatoes, and unless public notice of not less than two months be given, the department will not recommend proceedings under the Food and Drugs Act solely upon the ground that such fruits and vegetables in such small containers bear no statement of the quantity of contents. The crates inclosing such containers should, however, be marked with the number of small containers and the quantity of the contents of each.

Also, for the present and until further public notice to the contrary of not less than two months, the department will not recommend proceedings under the Food and Drugs Act solely upon the ground that the quantity of the contents is not marked upon the containers of the following articles, packed as described below. No objection will be interposed by the department to any trade-marking which is not false or misleading.

Asparagus in boxes and cases.

Beets with tops, bunched, in drums and hampers.

Cabbages in crates.

Cantaloupes and casabas in crates and baskets.

Carrots with tops, bunched, in drums and hampers.

Cauliflower in crates and hampers.

Celery in boxes and crates.

Eggplant commonly wrapped in paper and packed in crates.

Kale in barrels, baskets and hampers.

Lettuce in barrels, drums, baskets and hampers.

Onions, with tops, bunched, in drums and hampers.

Pineapples in crates.

Radishes, bunched, in drums and hampers.

Romaine in hampers.

Spinach in barrels, baskets and hampers.

Turnips with tops in drums and hampers.

Regulation No. 29 relating to marking the quantity of food in package form should be consulted. Special attention is directed to paragraphs (d) and (e) of that circular, which are as follows:

(d) If the quantity of the contents be stated by weight or measure, it shall be marked in terms of the largest unit contained in the package, except that, in the case of an article with respect to which there exists a definite trade custom for marking the quantity of the article in terms of fractional parts of larger units, it may be so marked in accordance with the custom. Common fractions shall be reduced to their lowest terms; decimal fractions shall be preceded by zero and shall be carried out to not more than two places.

(e) Statements of weight shall be in terms of avoirdupois pounds and ounces; statements of liquid measure shall be in terms of the United States gallon of 231 cubic inches and its customary subdivisions, i. e., in gallons, quarts, pints, or fluid ounces, and shall express the volume of the liquid at 68° F. (20° C.); and statements of dry measure shall be in terms of the United States standard bushel of 2,150.42 cubic inches and its customary subdivisions, i. e., in bushels, pecks, quarts, or pints; or, in the case of articles in barrels, in terms of the United States standard barrel and its lawful subdivisions, i. e., third, half, or three-quarters barrel, as fixed by the act of March 4, 1915 (38 U. S. Stat. L., p 1186); Provided, That statements of quantity



may be in terms of metric weight or measure. Statements of metric weight should be in terms of kilograms or grams. Statements of metric measure should be in terms of liters or centiliters. Other terms of metric weight or measure may be used if it appears that a definite trade custom exists for marking articles with such other terms and the articles are marked in accordance with the custom.

#### VALUE OF WINDBREAKS

It is still warm weather, but we may, if we have enough imagination, feel a premonitory shiver as we think of the wintry wind sweeping down upon the farm, drifting the snow, piercing every crack and crevice in barn and dwelling, nipping our noses, numbing our fingers, making the dumb beast miserable, and doing equal damage to the inarticulate orchards and crops.

"Never mind the weather if the wind don't blow," is an old and true saying. We can't keep the wind from blowing, but we can stop it blowing on us and our barns and orchards. Nine-tenths of our farms would be better if provided with a good windbreak. "Trees check air currents and therefore reduce the velocity of the wind. If set out in the form of windbreaks they serve as a protection to field crops, orchards and gardens, livestock and buildings, thus increasing the production of crops and lessening the consumption of fuel. They also furnish fuel, posts, and poles for the farm. The benefits derived depend upon the density and height of the trees."

#### Moisture Is Conserved

Maybe we have not calculated the important part a good windbreak serves in conserving moisture by breaking the force of the rapidly blowing air, which evaporate the water so quickly. It is stated that in certain extreme cases as much as 70% of the moisture ordinarily lost through evaporation, may be saved by a tall, thick windbreak.

Winter killing is largely diminished, snow is more evenly distributed and melts later in the season, thus holding back the fruit blossoms from the danger of early blooming and late frosts. Light soil is held from drifting. Many a desolate homestead could be made in a few years attractive to the eye and comfortable for man and beast by a judiciously planted windbreak. In its shelter children could play outdoors during sunny winter days instead of being shut up in the house.

A windbreak should have at least three rows of trees. Some should be of the dense, low branching varieties. Some should rear their heads high to protect as large an acreage as possible. It is impossible to recommend any particular tree without knowing the locality in which it is intended to grow. Consultation with a reliable nursery man, however, will give you all the information necessary, and from him you can obtain advice as to the best method of planning and placing the trees.

Wherever possible you should use evergreens in the windbreak. In addition to the many advantages you have secured a treasure of beauty for the winter months when other trees are bare and colorless.

Cattle when attacked by flies will stop grazing in the middle of the day and bunch up to fight flies. This causes loss to the cattlemen and is a cruelty to the cattle. Make a mixture by boiling together two quarts of pulverized resin, one quart of soap shavings, and one pint of water, until the resin is dissolved. Then add three quarts of water, one quart of oil of tar, one quart kerosene, and one quart fish oil, and boil well for fifteen minutes, keeping the mixture well stirred. Apply daily for two or three days, and afterward only once in every four or five days.

All interstate shipments of fruits and vegetables in containers must be in packages that comply with the provisions of the United States Standard Container Act. The baskets, crates, hampers and boxes must be in sizes containing half-pints, pints, quarts or multiples of quarts, slight variations either over or under size may be allowed provided the average for any shipment conforms to the standard.

Secretary of Interior Lane calls attention to the fact that there are millions of acres of waste land in the United States which could be reclaimed, and put to use by offering them to the home-coming soldiers for cultivation.

## Blight Control

### Is It Possible Without the Knife?

After six years of experience and consistent success in hundreds of orchards, we say

### Positively Yes!

HOW? By the use of "SCALECIDE" as a dormant or scale spray. It kills the hold-over canker that produces the twig and fire blight. At the same time, "SCALECIDE" will do all and more than any other dormant spray or combination of sprays will do—it will control scale and other insects, including pear psylla, leaf roller, bud moth, case-bearer and aphids. Read what these well-known fruit specialists say of

## "SCALECIDE"

### The Complete Dormant Spray

Prof. M. W. Richards, late of Purdue University, writes: "Even the old pit cankers seem to be healing over nicely. The young blight and black rot cankers are peeling off completely, and a nice, clean, healthy bark has been formed underneath. This condition does not occur on the trees sprayed with lime sulfur, hence I believe we are safe in saying that 'SCALECIDE' did it."

Mr. A. N. Brown, Georgetown, Del., who has charge of 1000 acres of orchards writes: "The enclosed branch [see illustrations at the right] was cut from a Yellow Transparent that was an extreme case of apple blight a year ago. One spraying with 'SCALECIDE' arrested further progress of the disease and new bark began to form, and late last season new buds appeared, which developed a growth of sixteen inches before winter. I have thousands of cases where one application did the work."

The experience of these two experts is typical of the experience thousands of other men have had. "SCALECIDE" saves labor, saves time, and *saves trees*—its use will make you money.

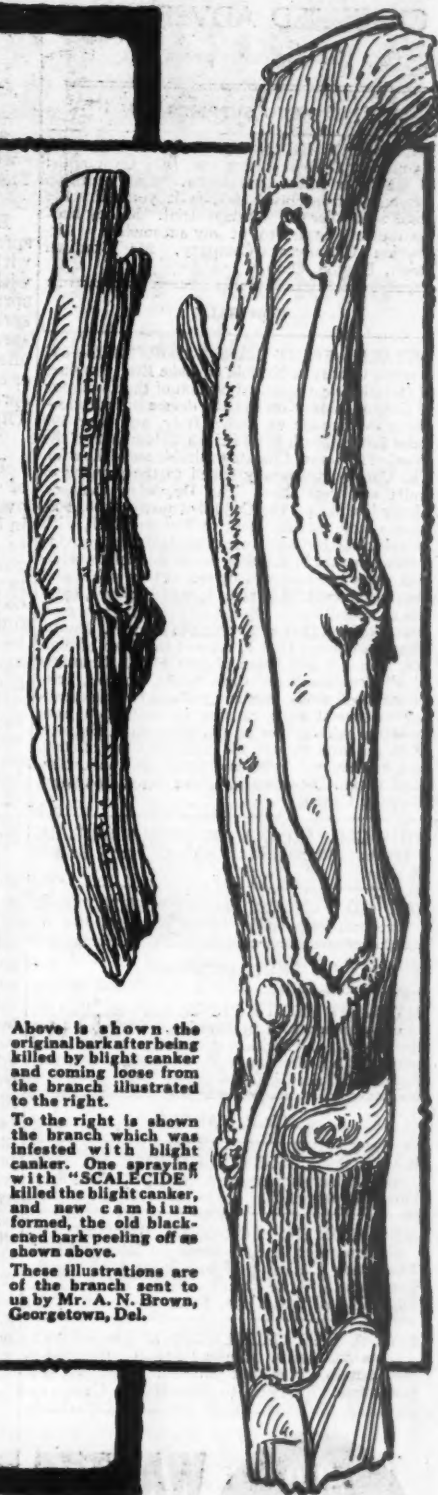
Write today for our *Money Back Proposition* and name of nearest dealer. You take no risk. It will cost you nothing to know the TRUTH. Address Dept. 11

### B. G. PRATT COMPANY

Manufacturing Chemists

50 Church Street

New York City

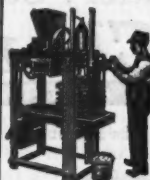


Above is shown the original bark after being killed by blight canker and coming loose from the branch illustrated to the right.

To the right is shown the branch which was infested with blight canker. One spraying with "SCALECIDE" killed the blight canker, and new cambium formed, the old blackened bark peeling off as shown above.

These illustrations are of the branch sent to us by Mr. A. N. Brown, Georgetown, Del.

### Make Your Own CIDER AND VINEGAR



Don't waste your wind-falls, culls, under-grades, etc.—turn them into money by making good marketable cider.

#### Mount Gilead Orchard Cider Presses

Are fully guaranteed. Capacity up to 8 bbls. per day. Hand or power; Hydraulic or hand screw. All steel construction. Easily moved from orchard to orchard. Greater mounted on press. Complete cider mill outfit ready to ship. We also make cider evaporators, apple butter cookers, vinegar generators, cider and vinegar filters, etc. Send for Free Cider Press Book.

THE HYDRAULIC PRESS MFG. CO.

184 Lincoln Avenue Mount Gilead, Ohio  
Or Room 119 M 39 Cortlandt St., New York, N. Y.

### 9 CORDS IN 10 HOURS



BY ONE MAN, IT'S RING OF THE WOODS. Saves money and backs. Send for FREE catalog No. B27 showing low price and latest improvements. First order gets agency. Folding Sawing Machine Co., 181 West Harrison St., Chicago, Ill.

### High Prices Wiped Out!

—By Del Dane, "The Old Stove Master"  
This is my year for a smashing price drive. It is war time, and I am sacrificing profits. I can do it because I am a manufacturer, and sell direct to users. I can save you a lot of money, particularly on Kalamazoo



#### Pipeless Furnaces

—that heat the whole home through one register. They cut fuel bills in half. And I have cut the price. Let me show you how I can save you \$25 to \$75 on the price and cost of installation. Write today—

#### GET MY BOOK FREE

Get my wholesale prices, 30 Days' Trial, Cash or Easy Payments, Unlimited, Unconditional Guarantee. Ask for Catalog No. 938.

Kalamazoo Stove Co., Mrs. Kalamazoo, Michigan

A Kalamazoo Direct to You



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Rate, 15 cents per word

## AUTO SUPPLIES

**FORDS CAN BURN HALF COAL OIL, OR**  
Cheapest Gasoline, using our 1918 Carburetor: 24 miles per gallon guaranteed. Easy starting. Great power increase. Attach it yourself. Big profit selling for us. 30 days' trial. Money back Guarantee. Styles to fit any automobile. Air-Friction Carburetor Company, 294 Madison Street, Dayton, Ohio.

## FOR SALE

**ONTARIO FRUIT LANDS FOR SALE**—642 acres, County of Norfolk on Lake Erie, Province of Ontario, most southern portion of the Dominion of Canada, almost on the 42d degree of latitude—the same latitude as Rome, Italy, and over 500 miles farther south than British Columbia and the Prairie Provinces. Climate equitable and delightful. The County is specially suited to the growing of fruits and vegetables. The Dominion Cannery, Limited, with a paid up Capital of nearly \$8,000,000, have a large establishment at Simcoe which, with two pickle factories, evaporating plant, etc., provide a home market in addition to the markets in adjacent cities and towns easily reached by steam and electric railways. 350 acres in apples, plums, cherries and small fruits. Seven sets of buildings, good water, natural gas for cooking and lighting. Immediately adjoining Golf Links and the town of Simcoe, having a population of over 4,000. Churches of all denominations, three banks, schools, telephone, good roads, excellent railway facilities leading to several cities ranging in population from 40,000 to half a million people within short distance. With the farm we will sell complete outfit of stock and machinery. Price and terms on application. Real Estate Department, Union Trust Company, Toronto, Canada.

**RHUBARB, ASPARAGUS, STRAWBERRIES,** plants. For price list. Alva Cathcart, Bristol, Indiana.

**FOR SALE—TO SETTLE UP ESTATE.** 40-acre fruit farm. Albert Price, Nokomis, Ill.

## FRUIT PICKERS

**MY FRUIT PICKER PICKS APPLES, PEARS** and peaches without bruising. Operated from the ground. No ladders necessary. \$1 for metal parts and full directions. P. W. Stafford, Box 104, Saginaw, W. S., Mich.

## HELP WANTED

**WANTED—A HORTICULTURIST OR ONE** who understands pruning. Apply Peerless Fruit Farm, Hamburg, Pa.

**MEN, WOMEN, 18 OR OVER, WANTED** immediately for U. S. Government War positions. Thousands Clerical positions open, \$100 month. Easy work. Write immediately for list positions. Franklin Institute, Dept. T142, Rochester, N. Y.

**\$5.00 A DAY GATHERING EVERGREENS,** roots and herbs. Ginseng \$14 lb. Belladonna seed \$64 lb. or grow it yourself. Book and war prices free. Botanical-16, New Haven, Conn.

**\$90 to \$300 a Month**  
**WANTED MEN!**  
To Learn **MOTOR MECHANICS**

To fill constant demand for trained men in all branches of the Automobile, Tractor, Motor Truck and Farm Power business. On account of labor shortage, opportunities never so great as now!

Learn Easily and Quickly in **RAHE'S PRACTICAL SCHOOL**

—by daily work on real Autos, Motor Trucks, Tractors and Gas Engines, of all standard types. —Enormous equipment and scores of Master Mechanic Instructors make sure you will get what you come for.

—Only school that refers you to numerous Successful Graduates, right from your own section of the country.

—No "extras" of any kind here—only additional cost to take your course at Rahe's School is difference in carefare.

**Special To Drafted Men**

Secretary of War says trained men "will be given mechanical opportunities." My "War Certificate" has enabled scores of men to pass into Motor Divisions for service behind the lines.

Write Today for **7-Day Trial Offer** and **Big 84-Page Book** **FREE**

Also give age and present occupation **RAHE'S AUTO & TRACTOR SCHOOL** "GREATEST IN THE WORLD" 2372 Oak Street, Kansas City, Mo.

## What is Said About Spray Guns

(See page 13, June Issue AMERICAN FRUIT GROWER)

Yours of the 23d received. And we have nothing but good words for the spray gun. The claims are not too strong. Very truly,  
A. A. MARSHALL, Fitchburg, Mass.

Replying to your inquiry concerning the spray gun, would say that we are delighted with its performance. Two spray men with two guns are now doing all of our spraying where we used to use three sprayers and six men. We regard the spray gun the greatest help that has been offered growers in several years. No grower can afford to be without one on his power sprayer. Yours very truly,  
THE W. W. FARNSWORTH COMPANY,  
By W. E. YOUNG, Waterville, O.

I used a spray gun for spraying 16 acres of apples, very large trees, the last time over last summer. The pump was old and in bad shape. It took only about 4½ days to spray this orchard both sides with the gun, one man doing all the work, where in previous spraying it took from 6 to 6½ days for two men, with poles, and the gun did a much better job, taking quite a bit less spray material. I used this same gun again this spring, using it on 3½ H. P. rig, getting much more satisfactory results, with even more saving of time. With the rig I maintained 300 pounds pressure, while with the old outfit was able to hold only 150 pounds. I sprayed 9 acres of bearing peaches, mostly 9-year-old trees (2 acres being 5-year-olds) both sides in just 9½ hours, counting time taken to fill up with actual spraying time. Yours,  
WM. C. HUNT, Brockport, N. Y.

We have yours of recent date regarding the value and disadvantages in the use of spray guns by fruit growers. This is our second season using spray guns. So far we have not noted any disadvantages, so we will have to write concerning their advantages over poles and nozzles. In the beginning desire to state that I have personally swung a spray pole for the past 15 years. Starting with the knapsack variety, from it to the barrel pump and power outfit. Used the latter the past 7 years. We beg to make comparisons between the two methods as they are the only two used at present in applying liquid spray. Spraying with poles is very hard work on the back and arms. A spray gun is light and there isn't much motion used, only enough to direct the spray to the different parts of the tree. It never catches on the limbs or clogs up at the nozzle. You can reach the tops of trees with a gun when there is some wind blowing which you can't very well do using a regular length pole. When spraying for scale it is necessary that you get the tops of the tree thoroughly sprayed, otherwise the tree and fruit will be again infected. We had some trouble along this line in a block of tall Bens, when using poles, but we did the trick with a spray gun. A good gun is more economical than spray poles inasmuch that it does not take as much solution to do the work. Less is wasted. From a cost standpoint the gun is cheaper than two sets of poles and fittings. The best point for the use of spray guns this season is the saving of man power. One man can do the same amount of work as two with poles and nozzles, and by putting in a disc in the gun with the proper size opening he can use the entire capacity of his pump, be it a one, two, three or four-cylinder outfit. True, he has to travel faster on his feet, but by carrying the hose and gun on a rack he is ready to work any place when loaded. We have also found that the operator does not have his eyes put out as often with a spray gun. Regarding the grade of fruit raised will say that our crop (3,100 barrels) was up to our regular high-grade standard and by cleaning up the tops of tall trees there was no waste from scale infected apples. Yours very truly,  
E. S. ARMSTRONG, Kampsville, Ill.

The carrier pigeon has long been a highly respected bird. Now his rival, and apparently his superior, is the Homer pigeon. This bird is extensively used in modern warfare, and the little winged messengers save many lives. 97% of Homer pigeons "go through."

Who has been to Cairo? We want to know if it is true that men in the native tailor shops iron clothes with their feet.

At Camp Zachary Taylor there is a training school for Chaplains. There they are taught to ride, along with other desirable accomplishments. The exercise is not without its amusing side—to the on-lookers. Lieutenant Dodd, with great good humor, writes: "From the moment I got on that horse's back I prayed fervently, though silently, and when the order came to gallop I prayed aloud."

We have cause to be thankful that in the United States "standing in line" indicates a desire for theater tickets rather than for bread rations.



## DECREASE Packing Time and Expense

No expensive time is wasted in figuring how each layer is to be packed when the *Bushel Shipping Basket* is used.

## The Universal Package

is easy to pack. The fruit or vegetables seek their position as they are poured in.

You may not get the very highest price, but you get the **Largest Net Profit** because so much is saved on packing.

Send for Prices That Make You Money

Package Sales Corp.

104 E. Jefferson Street

South Bend, Ind.

## American Fruit Grower

## Make a Profit on Waste Apples

**WHY** not make your windfalls, culls and unmarketable fruit pay you a good profit—turn your usual orchard losses into real money? With this Orchard Queen you can extract every drop of juice—no waste or loss at all.

## ORCHARD QUEEN CIDER MILL

Simplest, cleanest, most easily operated of all cider mills.

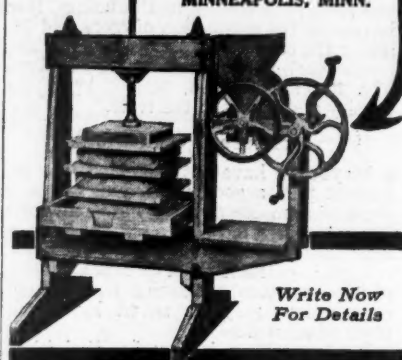
Does not crush apples, but grates or grinds them, breaking the cells, so that when pomace is pressed in sanitary cloth-lined forms, all the juice is extracted. Insures greatest quantity and highest quality of cider. Easily operated by hand or power.

Write NOW for full information about how to turn your orchard losses into profits.

**PUFFER-HUBBARD MFG. CO.**

3220-26th St., E.  
MINNEAPOLIS, MINN.

100% Juice



Write Now For Details

## THE SELF-OILING WINDMILL

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load. We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws. Write **AERMOTOR CO., 2500 Twelfth St., Chicago**

## Commercial SULPHUR

Brooklyn Brand 99% Pure

For Orchardists and the Manufacturer of Spraying Material

Battelle & Renwick

80 Maiden Lane

New York

## Turn Cutlery Steel Into Your Fields!

Do It **Clark** DISK With **"CUTAWAY"** HARROWS

That's what the disks are made of—a special cutlery steel—forged edge (cut out or solid)—so sharp and sturdy that mother earth crumbles into tiny particles just as you want her to. Pulverize the soil well. Get it in the best condition to give the world bigger and better crops. Our Allies are depending on them.



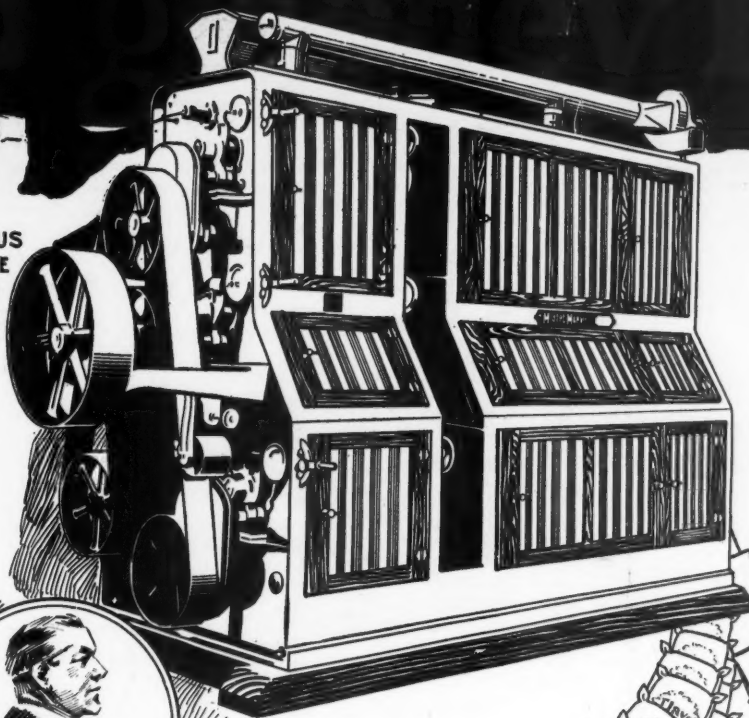
WRITE FOR THIS BOOK

It's a valuable one to have; tells what you need to know about "The Soil and Its Tillage." With it, we will gladly send our complete Implement Catalog and names of your nearest dealers in CLARK "CUTAWAY" Implements.

**The Cutaway Harrow Company**  
409 Main Street, Higganum, Connecticut  
Mater of the original CLARK Disk Harrows and Plows.



LET US  
PLACE  
YOU  
HERE



Merchant



Baker



Elevator Man

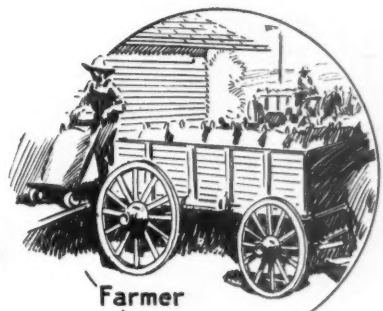


Housewives

## A Business Both Patriotic and Profitable

HERE is a wonderful opportunity to engage in the nation's most needed business—an unrivaled chance for financial success.

Make flour of wheat and other grains grown at home, milled at home and sold at home to home people.



Farmer

## \$100 to \$1000 Extra Profits for Men in Any Business—An Unequaled Opening for Any Man Seeking Opportunity

In every town—your town—there are men who are leaders in business success. They are of two classes. The first is the man with an established business who never misses an opportunity to expand. The other is the man who has vision to see when opportunity is ripe in a new line.

One of these men will soon be earning big rewards in your town with the wonderful mill that is rapidly bringing flour making back where it belongs—to the community where the grain is grown. Will you be the man? Will you investigate now? Will you learn what others are making with an

## AMERICAN MIDGET MARVEL MILL

This great money-making mill enables men without previous milling experience to mill the highest grade flour at the lowest cost. It brings them the right to market their flour under our nationally advertised brand—FLavo FLour. It gives them membership in the Community Marvel Millers Association.

### Note These Remarkable Features

The American (Midget) Marvel Mill can be installed in small space, requires but one man to operate and takes but little power. It is automatic, simple and will last a lifetime. It will produce more pure white, nutritious flour per bushel of clean wheat than any other milling process.

From grain to flour in 45 seconds as against a half hour with other processes is the record of the American (Midget) Marvel Mill. This new, quick process retains the rich, nut-like flavor of the wheat berry and produces flour that is in constant demand.

Anglo-American Mill Co., 2-34 Trust Bldg., Owensboro, Ky.

### Our Service Plan Assures Success

To make success assured, we virtually enter into partnership with you and work right along with you in the operation of the mill and the building up of a profitable business. Over 1,300 owners are enthusiastic in their praise of the mill and the co-operation they receive.

This is **your** opportunity. Investigate it now. The winners are men of action! Send coupon today for full details of our 30-day trial offer, easy terms and copy of new book—"The Story of a Wonderful Flour Mill." You risk nothing. And no three-cent investment ever offered you more.

(237)

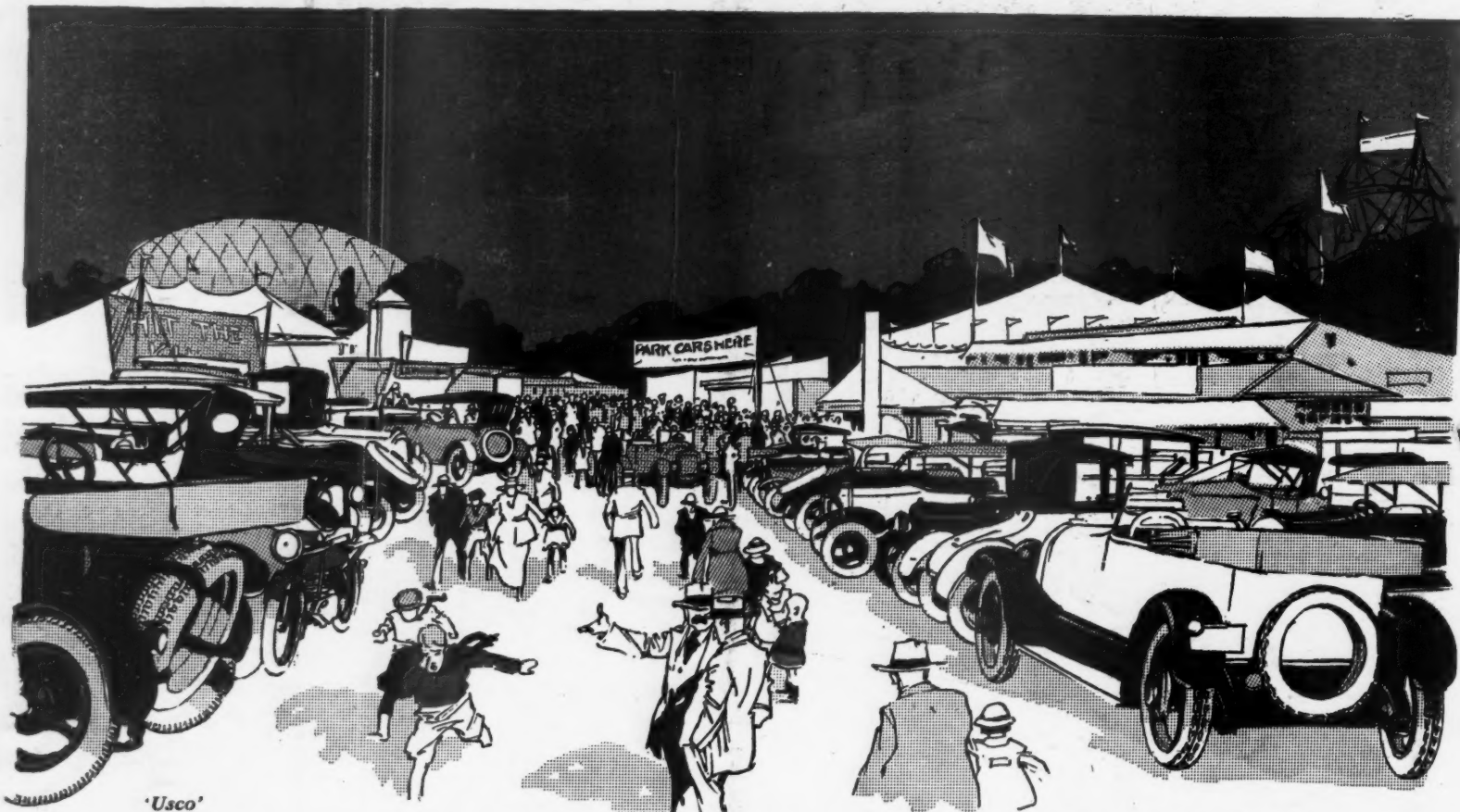
ANGLO-AMERICAN MILL CO.

2-34 Trust Bldg., Owensboro, Ky.

Send at once full information about your wonderful flour mill, free trial offer, easy terms and co-operative plans. Include evidence of what owners are doing with your mill.

Name.....  
Business.....  
Address.....





'Usco'

## Rubber Tires and Farming Advancement

Through all farming communities, the motor car has had an important part in the improvement of agricultural methods.

The county fair or agricultural exhibition, the dairy and live stock show, and many kinds of educational gatherings and demonstrations—all these affairs designed to bring farmers together in the common interest have received a great stimulus from the general use of motor cars.

It is plain that the future will demand an even greater service from your car. Its usefulness is increasing every year.

For that reason the time has come to look upon the equipment of your car as a strict business matter.

In buying tires especially you should buy in a business-like way for utmost economy and reliability.

Equip your car with United States Tires. These good tires have been developed scientifically in the same manner that farming methods have been improved. Their durability has been greatly increased. They are constructed to guard against tire troubles. They will give you greater mileage per dollar of cost than any other tires you can buy.

United States Tires include types and treads for every condition of driving. Any United States Sales and Service Depot Dealer will cheerfully aid you in selecting the right tires for your car and your roads.

*For passenger cars: 'Usco', 'Chain', 'Royal Cord', 'Nobby' and 'Plain'.  
Also Tires for Motor Trucks, Motorcycles, Bicycles and Airplanes.  
United States Tubes and Tire Accessories Have All the Sterling Worth and  
Wear that Make United States Tires Supreme.*



## United States Tires are Good Tires

